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TEACHER SELECTION METHODS.

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THIS REPORT OF A TWO-DAY CONFERENCE ON TEACHER SELECTION METHODS, ATTENDED BY 45 EXPERTS IN THE FIELD, CONTAINS 13 POSITION PAPERS DEALING WITH (1) PERSONNEL SELECTION IN NON-TEACHING FIELDS, (2) PROBLEMS IN TEACHER SELECTION, RECRUITMENT AND IN VALIDATION OF SELECTION PROCEDURES, AND (3) NEEDED RESEARCH IN TEACHER SELECTION--ALSO CONFERENCE PROCEEDINGS ON (A) TEACHER SELECTION METHODS, (B) PERSONNEL SELECTION IN INDUSTRY, (C) PERSONNEL IN CIVIL SERVICE, (D) DESIRABLE POLICIES AND PROCEDURES FOR SELECTION OF TEACHERS, (E) PROBLEMS IN VALIDATING TEACHER SELECTION POLICIES AND PROCEDURES, (F) NEEDED RESEARCH IN THE AREA OF TEACHER SELECTION, AND (G) SUMMATION OF THE CONFERENCE. RECOMMENDATIONS INCLUDED (1) NEW AND IMPROVED SELECTION PROCEDURES, (2) BETTER UTILIZATION OF EDUCATIONAL MANPOWER, (3) SYSTEMATIC PLANNED REGIONAL SEMINARS AND ANNUAL CONFERENCES. (AW)

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TEACHER SELECTION METHODS

Project No. 6-1665
Grant No. OEG 1-6-061665-1624

Harry B. Gilbert

Pennsylvania State University

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June 1967

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The preparation for a conference of this magnitude called for considerable cooperation and generous expenditure of energy. Many individuals are to be thanked, and it is hoped that oversights will be forgiven.

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Most of all, we are grateful to the United States Office of Education for making the conference and publication of proceedings possible.

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SECTION I: INTRODUCTION

The current national shortage poses serious problems to those responsible for selecting teachers in local school districts. On the one hand, there is always the danger that selection techniques may screen out applicants who would have proved to be competent teachers. False negatives, in the technical language of the personnel man. But, on the other hand, the very shortage serves to attract marginal prospects, and indeed, applicants who are seriously lacking in basic education themselves, let alone the ability to teach.

It becomes essential, therefore, to examine procedures in the selection of teachers, to make certain that the techniques are reliable and valid, as well as understandable and acceptable to the community.

In this context, the Board of Examiners of the public schools of the City of New York, the largest teacher selection agency in the country, has undertaken a series of steps to study the field of teacher selection for its relevance locally as well as nationally. The first step in this process was a survey of teacher selection policies and procedures in large public school systems in the United States. Aided by a grant from the United States Office of Education, this study has been completed and has been available in booklet form.

The next step is the conference, which is summarized in these proceedings. A group of experts in the field of teacher selection was invited to meet for a two-day conference to explore and make specific recommendations with respect to needed research and action in teacher selection. This group of 45 met from November 16 to November 18, 1966, at Grossinger's, New York. Again the United States Office of Education has made possible the conference and publication of the proceedings through a grant.

The purposes of the conference were as follows:

1. to suggest needed research in the area of teacher selection,
2. to offer advice regarding designs and implementations of needed relevant studies,
3. to review and discuss the results of the survey of policies and procedures of selecting teachers in large public school systems in the United States,

4. to consider various aspects of examination procedures, such as the training of raters, types of rating forms to be used, independent vs. joint ratings, and setting of standards,

5. to consider the extent to which personnel selection practices in fields other than education can be applied to the selection of teachers, and

6. to formulate desirable policies and procedures of selecting teachers, with some special consideration of teachers of children who are culturally different.

A number of the invited experts prepared position papers prior to the conference. These are reproduced and the reader is invited to study them before reading the transcription of the conference proceedings. The latter present clearly the problems as they are faced daily by those who are struggling to staff schools in inner-cities - today's major educational problem. It is a difficult, probably impossible, task to summarize fully the deliberations of this two-day conference. Hence, a careful reading of the proceedings may well bring the reward of new ideas or re-inforcements.

Certainly one point emerges. Modification of selection procedures will not solve the problem of teacher shortage in inner-cities. The major cities of the country, all represented at the conference, employ a variety of teacher selection procedures. Nevertheless, no city has solved the problem of staffing the schools in the inner-cities. The solution to this problem is part and parcel of the problem of large cities--housing, employment, transportation, discrimination, poverty, urban social pathology. Here is a major sub-problem which remains for intensive study. Given the facts of big city existence, how can we attract and select teachers who are most likely to be successful with slum children? It is hoped that this problem will engage the attention of some of those who will follow the lead of this conference.

A debt of gratitude is felt toward the participants in this conference. They came from great distances, indeed from Hawaii to Brooklyn and various points in between. Many prepared thoughtful position papers in advance. All worked hard for two days and their expressions are here recorded. Their ideas may serve to improve procedures here or there and to advance research in teacher selection. This would be the ultimate expression of gratitude for their service, making a contribution toward the education of our children.

It is sad to note that Dr. Isidore Bogen, the Chairman of the Board of Examiners and co-member of its Research Committee, passed away unexpectedly and in the vigorous prime of life. He was a responsible spark in the conceptualization of the overall plan for research in teacher selection of which the conference was a vital part. He was looking forward with enthusiasm to the conference, and indeed met with an accident as he prepared to leave for his conference, an accident which ultimately proved fatal.

The conference proceedings are dedicated to his memory.

SECTION II: POSITION PAPERS

Selection Procedures at Standard Oil Company (New Jersey)

Paul C. Baker

Standard Oil Company of New Jersey

Standard Oil Company (New Jersey) recognizes the crucial importance of well qualified employees at all levels, in all locations, to its continued successful operation around the world. Great emphasis is given to establishing and maintaining sound, consistent practices to insure that the company will continue to attract and to select the best of possible candidates for all openings. This paper examines these selection procedures, their validity and their relevance to the selection of public school teachers.

The comments that follow are not intended as a statement of official company policy nor are they intended to imply that these practices are rigidly followed in every detail in the hundreds of employment offices in all the countries of the world where Standard Oil has an interest. Rather they represent the collective aspiration of all our managers which gives direction to their continuing efforts to improve their selection procedures.

To better appreciate the foregoing qualifications perhaps a word about the Standard Oil Company (New Jersey) and six major regional affiliates, Humble Oil and Refining Company, Imperial of Canada, Esso Europe, Esso Inter-America, Esso Standard Eastern and Esso Africa. Each of these companies in turn is composed of affiliate companies in each of the countries of the region. In addition to these are the major producing companies, Creole of Venezuela and Esso Libya; an international trading company, Esso International; Esso Chemicals, with subsidiary affiliates around the world; and a variety of other special purpose affiliates. In view of the size and complexity of this organization a very remarkable degree of uniformity in selection procedures can be observed.

To give emphasis and balance, to better relate it to overall organizational needs, the selection process cannot be properly viewed in isolation, but must be seen in the perspective of a number of related functions:

- Analysis of needs: How many people, with what qualifications, are needed today, next year, five years from now, twenty years from now?

- Recruitment: Attracting the attention of possible candidates to the challenges and opportunities of employment with Esso.

- Selection: Choosing from among applicants those most likely to succeed in the company.

- Induction: The act of settling upon the conditions of employment and transforming an applicant into an employee.

- Orientation: Acquainting the new employee with the organization, its goals, its structure, its functions, its relationships with other organizations.

- Job Assignment: Getting the new employee into productive work, setting goals and expectations.

- Performance Evaluation: Judging the degree to which the employee's work performance satisfies the requirements of the job.

The above outline is carried to this last step, Performance Evaluation, because upon it hinges the validity of all the others, most particularly the validity of the selection procedures. It may also be relevant to the present discussion because of the differences that exist between the opportunities for sound evaluation programs in business and in schools.

Each of the above functions merits detailed discussion to fully appreciate all the inter-relations, but only the selection process will be dealt with here.

There is a degree of selection present in the recruiting process. Standard Oil recruits from those colleges and universities which offer training in those skills needed by our employees and, further, from only those that experience has shown to produce a larger proportion of successful employees. There is also selection implied in the choice of media used to announce openings of various types. However, selection proper begins with the screening of the application blank, or as labeled at Esso, the Qualification Record. At this step applicants are accepted for further consideration on the basic minimal job requirements such as age, education and training, and prior work experience.

Having passed this first screening step applicants are invited to take a battery of qualifying tests. All test batteries have a demonstrated validity, validities ranging from .60 to .75. They all span a wide spectrum of mental measurement and have these elements in common:

- A test of verbal intelligence.

- A test of non-verbal or abstract intelligence.
- A biographical information questionnaire representing an extended objective interview on paper.
- A test of job related judgment -- i.e., sales judgment, supervisory judgment, etc.
- A temperament or opinion questionnaire.
- A test of job skills where appropriate -- i.e., typing and dictation for secretaries.

It is interesting to note the uniformity of test battery content and test validity whether considering a salesman in Norway, a mechanic in Libya, a manager in Peru, or a secretary in New York. Standard Oil's research over the past twenty years in nearly all noncommunist countries of the world seems to indicate that a broadly based, carefully researched battery of tests can become a most effective selection aid for any job.

Applicants passing the test battery are then interviewed by three or more managers. In some locations the interviewing process is carefully controlled, the managers have had extensive training and can be shown to contribute to the overall validity of the selection process.

For a more detailed description of these selection procedures a statement from the Administrative Procedures Manual of an Esso Refinery is attached.

The procedures outlined above are quite generally and successfully applied in all Esso selection programs--there are obviously variations. But there are a number of implications, differences between business and education, that need to be explored to assess the applicability of these methods to teacher selection.

In all of Esso's selection programs people are hired to fill a more-or-less specific entry job. The emphasis, however, is upon the selection of people with the capacity and the motivation to continue to grow and develop throughout their careers and to advance to successively higher level more responsible jobs. The implication is that a considerably broader range of qualification standards can be established and a considerably broader range of qualifications in people can be accepted than would be true if people were hired only for one specific relatively unchanging job.

When a person is viewed as ineffective on one job there exists in most cases a wide variety of other possible jobs to which an individual can be assigned. What similar opportunities exist for the ineffective teacher?

To develop good selection procedures implies that there exists some standard by which the procedures can be evaluated to determine if they are good. In business this implies measuring the quality of the people selected, and elaborate programs are developed to provide this kind of data against which the selection program is compared. Although there is still much work to be done in the development of better more accurate performance evaluation programs, it still appears that very much more progress has been made in business than in education. What opportunities exist for such criterion research in the schools?

SELECTION PROCEDURES

(From the Administrative Procedures Manual of a refinery.)

Introduction

To aid management in its function of recruiting, selecting and placing the best possible qualified men in existing openings, the Employee Relations Division has established a set of procedural guides which call upon the broadest possible resources of the staff and line organizations of the Company.

The eight steps of the complete selection procedure and the departments responsible for them are:

1. Announcement of openings - Employment.
2. Application Screening - Employment.
3. Testing - Training.
4. Medical Examination - Medical.
5. Interview Committee - Employee Relations and Line Management.
6. Security Check - Plant Security.
7. Former Employer and Credit Check - Employment.
8. Summary Evaluation - Line Management and representatives of all the above.

Associated with each of the above steps are detailed procedures and a set of qualification standards. The procedures are fixed; the standards vary, first, with respect to the specific openings; second, with respect to the status of the applicant as a present employee, former employee or a new employee.

For present employees selection standards may be lower than for new employees.

The reasons for this are:

1. For present employees such factors as work experience, job success, motivation, flexibility, suitability as an employee are already a matter of record.

2. It is the company's desire to offer present employees continuing opportunities and challenges.

3. When more applications are received than there are openings to be filled it is possible and reasonable to set higher standards for new applicants, standards which will reduce to a minimum the probability of failure of the new employee.

Following is a detailed description of each step in the selection procedure. The standards adopted for the 1959-1960 selection programs and the reasons for these standards are summarized in an appendix.

Announcement of Openings

After Management has determined a need for additional employees for a particular operation or department, this need is made known through a series of announcements in the following order. The time between the several announcements may vary from a matter of hours to several weeks, and their order may vary with the specific openings.

1. To Management Personnel through normal channels of communications and the Management Information Bulletin.

2. To the Union through discussions with appropriate members of Management.

3. To Employees through the Daily Bulletin and the Esso News.

4. To Former Employees who have been laid off within the past year.

The objectives of these announcements are:

1. To inform Management personnel and to enable them to answer questions from and inform employees and the general public.

2. To inform all employees of the need and to advise them of the requirements for eligibility and the procedure to follow to apply for transfer.

3. To acquaint former employees with the situation insofar as it may apply to their recall rights or reemployment possibilities.

The announcements of openings, in general, state as clearly and simply as possible:

1. The nature of the openings.

2. Instructions on how to apply and where to get additional information.

3. Specific requirements which applicants will be

expected to meet such as:

a. Have certain prior work experience.
b. Have a certain educational level.
c. Pass a medical examination.
d. Pass a selection test battery.
e. Be acceptable to interview committee.

The statement of requirements will encourage only those potential applicants to apply who meet the requirements and will avoid unnecessary confusion and wasted effort by employment personnel and by large numbers of obviously unqualified applicants.

Application Screening

Screening is the process of separating and eliminating from further current consideration applicants for employment or transfer who do not meet desired standards. It occurs during each of the eight steps in the employment procedure. This section deals with the preliminary screening of applications prior to that accomplished at other steps in the selection procedure.

Employment maintains an open door policy toward the public and will accept applications "from anybody at any time." Most applicants do not request an interview, but one will be arranged for anyone who desires it. The Employment Interviewer reviews the application, explains our procedure and current employment outlook and usually makes a note on the application of his over-all impression of the interviewee. The application is retained for one year for consideration in the event openings should occur. Unless renewed, it is then destroyed. This also applies to applications of present employees for transfer.

Initial screening of employee-applicants for transfer or of former employee applicants is usually accomplished by examination of seniority and other personnel records and by interview. These people sometimes voluntarily withdraw their application after an explanation and discussion of the openings and requirements.

Screening of applicants for "new employment" to determine which applicants should be invited to take tests is accomplished largely by inspecting application forms. Desired standards are determined first. The criteria used in this preliminary screening will vary with the type and number of openings and the availability of qualified applicants. They may include such factors as:

1. Age.

2. Education and training.

3. Prior experience.

4. Location of residence.

5. Relationship to employees or annuitants.

6. Physical proportions (height and weight).

Testing

The purpose of the testing program is to collect from the applicant by means of group administered paper-and-pencil tests such supplemental information regarding his mental abilities and attitudes as will be useful to management in deciding if the applicant is likely to succeed as an employee.

The kinds of test measurements obtained and the questions they help to answer are:

1. Intelligence - can the man learn to do the job?
   - will he be able to keep up with changes in the job?
   - can he be expected to progress to higher jobs?
   - will he show sound judgment in crucial situations?

2. Educational Achievement - does the man have the basic education upon which to build?
   - does his achievement conform to his years of schooling and his intelligence?
   - does his achievement show that he is highly motivated?

3. Attitudes - does he have the attitudes, opinions, and personal history that have been shown to be characteristic of our successful employees?
   - does his judgment about himself and other people agree with the principles of human relations practiced in the Company?

4. Job Knowledge - does the man know the principles and theory of his craft?
   - does he know the standards of practice of his craft?

The tests comprising a particular battery and the passing scores on these tests are prescribed by management in terms of the needs of a specific selection program.

Passing the test battery qualifies the applicant for consideration in succeeding steps in the selection procedure.

To pass the selection test battery means to achieve a certain minimum score on each test in the battery. Passing scores are determined by considering:

1. The content of entrance training programs.
2. The norms of present and past incumbent groups.
3. The job requirements, present and future.
4. The number of applicants.
5. The status of the applicant: present, former or new employee.

The administration of the testing program is carried out by the Training Department.

1. Testing periods are scheduled both on week days and on Saturdays. Applicants are notified by the Employment Office of the optional testing periods open to them. They are asked to indicate in which period they will take the tests so that preparations can be made for them.

2. The test battery is administered to small groups of from 15 to 25 applicants in a room. Several such small groups may be tested simultaneously. Every precaution is taken to insure uniformity in test administration from group to group.

3. The tests are scored immediately upon completion of the testing. Rosters of the test scores are prepared and distributed to the Head of the Employee Relations Division, the Head of the Employment Department and to members of the Interview Committees. Passing scores and individuals achieving these scores are indicated on the rosters.

4. Applicants failing to pass the tests are notified by the Employment Department. Present employee applicants are notified through their Department Heads. Those passing the tests are notified of the time and place to report for a medical examination and an interview by the Interview Committee. Other than an indication of passing or failing the tests, the results are not, in general, discussed further with the applicants. Present employee-applicants may discuss test results with their department head.

5. In the final Summary Evaluation step of the selection procedure the test results for each individual applicant are reviewed together with data collected in the other steps of the selection procedure. A member of the Training Department is present for more detailed analysis and interpretation of tests scores as they are related to other data.

Medical Examination

The purpose of the medical examination is to determine and evaluate the general health status of the applicant as it is related to his ability to perform the job for which he is applying. Because employments are made on a career basis, factors that may affect future health are considered.

1. Appointments for the medical examination are made by the Employment Department. As a convenience to new applicants and former employees, appointments are made for the same day as for the interview.
2. For present employees applying for transfer, a medical history is available. They are examined only if additional information is needed.

Medical standards for a job are determined by considering the physical, emotional and psychological demands of the job. The degree to which an applicant meets these requirements is reported in terms of:

1. Over-all physical rating on five-point scale.
2. Disabilities or physical limitations.
3. The probable future state of applicant's general health.

The data reported by the Medical Department are evaluated along with data obtained in other steps of the selection procedure in the Summary Evaluation step. A doctor is present at the final summary evaluation to advise those making the decisions.

Interview

Each applicant is interviewed by a three-man committee. The purpose of this interview is to gather data about the applicant that are available only in a face-to-face situation. The types of questions for which answers are sought are:

1. How well does he express himself? Listen?
2. Does he show self-control?
3. Is he enthusiastic, highly motivated?
4. How well does he think?
5. Does he have the ability to learn?
6. Will he be able to work well with others? Will he fit into the work situation for which he is being interviewed?
7. Is he able to integrate his education and experience?
8. Will his personal appearance and manner add to or detract from his ability to work with others?

Procedure

Interviews are usually conducted by three-man committees on the basis that the evaluations made are subjective and three opinions are better than one. More judgments could be obtained by using larger committees, but having the applicant face such a large group might tend to upset him. Two members of the committee are experienced supervisors, department heads, usually, who are familiar with the work successful applicants will do. The third member is usually selected from one of the Employee Relations Departments. This is because of Employee Relations' interest in personnel selection and, at the same time, provides something of an "outside" evaluation.

Thirty to 45 minutes are devoted to each interview. Each interviewer records his impressions of the applicant on a form especially designed for the purpose. In order to get independent judgments, interviewers record their evaluations without benefit of consultation with fellow interviewers. Each interviewer then ranks those applicants he has interviewed, again without consultation. Lists from the several interviewers are consolidated. Interviewers then discuss their evaluations among themselves and later with other members of management. (This is discussed in more detail elsewhere in this report.)

Standards

Applicants are compared to each other and are ranked. They are then (1) compared to the best people in jobs for which they are being interviewed, and (2) compared to the interviewer's own standards based on his experience as a supervisor. Based on these comparisons, interviewers determine which people on the rank order list of applicants are acceptable, or meet the standards.

Security and Credit Check

Experience indicates that the better employees are law-abiding and meet their financial obligations. In this regard, the best predictor of future conduct of an individual is probably the record of his past conduct. Therefore, it is important to consider past records in these fields. There are a number of private investigating firms that provide this information for a fee. In the past, Dun and Bradstreet and Retail Credit have been used. More recently, however, State Police Department records have been screened and reports from the Baton Rouge Credit Bureau have been obtained.

State Police Headquarters maintains on IBM equipment records of all arrests, by name, in this and a number of other states. The Plant Security Department maintains a close relationship with State Police Headquarters. Names of applicants who have passed tests and are tentatively recommended by interviewing teams are taken by Plant Security Personnel to State Police Headquarters and screened for records of arrests. Detailed records are obtained on any applicant with an arrest record.

Detailed written credit reports are procured from the Baton Rouge Credit Bureau. These reports itemize credit transactions the applicant has had in Baton Rouge and provide a good means of evaluating "how he handles financial obligations."

Former Employer Check

Former employers and close acquaintances usually have good ideas of how an applicant "gets along" with other employees and other people. Former employers are also usually familiar with the type of work the applicant is qualified to do and the degree to which he applies himself as well as his work habits and other traits. Experience has indicated, however, that formal or written inquiries to former employers or references have resulted in very little worthwhile information.

A more effective system for obtaining desired information is to telephone former employers and inquire about the character and work habits of applicants. In general, former employers are very free to discuss the applicant on an informal and personal basis. These informal appraisals have been very worthwhile in the screening and final selection of employees.

Since many applicants prefer that their present employer not know of their interest in employment elsewhere, our policy is to not contact present employers. In cases where an applicant has had no former employment, efforts are made to contact neighbors, professors, or some other persons who may have personal knowledge concerning the applicant's character.

Summary Evaluation

The purpose of the summary evaluation is to bring together all the people who have contacted applicants for the purpose of making an over-all evaluation of the data collected in each of the preceding steps. In attendance at this meeting are representatives from:

1. The Employment Department.
2. The Training Department.
3. The Medical Department.
4. The Departments where the openings exist.

The applicants who were interviewed by the Interview Committee are discussed one by one. At this point final eliminations are made on the basis of one or more of the following:

1. A police record.
2. Poor credit report.
3. Poor recommendation by former employers or references.
4. Recommendation of the Medical Department.
5. Low evaluation by the Interview Committee.

All of the data assembled for each applicant are examined and discussed. Additional interpretations of the data are contributed by staff members. Critical impressions and incidents recorded by the Interview Committee are evaluated and related to committee rankings. From these discussions comes a ranked list of names of applicants recommended for employment. This list, together with a summary of all data, is sent to upper Management for review and approval before offers of employment are made. Should the number of fully qualified applicants exceed the number of openings, the best of those qualified are made offers. If there are fewer qualified applicants than openings, further efforts are made to secure more applications and the process is repeated.

Personnel Selection Practices in Industry

Douglas W. Bray

American Telephone and Telegraph Company

Personnel selection practices in industry cover such a wide variety of methods that no ample justice could be done to all of them in any relatively short presentation. This paper, therefore, will be focused on three methods which are used widely in the Bell System for selecting the men and women to manage the telephone business in the future. These three methods are those which make use of (1) biographical data, (2) attrition, and (3) the assessment center.

The Bell System Scholarship Study

Since the Bell System recruits up to 2,000 college graduates per year, the business has long given attention to methods of selecting the most promising of those available. Starting as long ago as the 1920's, studies have been made of the relation of performance in college to progress in management. These studies have always shown a definite positive relationship. Recently, however, a most ambitious replication of these studies was made - a replication which substantiated the findings of the earlier investigations. The details of this study may be of interest.

The Bell System College Record file contained data cards covering the approximately 30,000 graduates of accredited colleges employed by the System at the time this study was started. For various reasons, the data cards covering the following groups of men were eliminated from the study: those graduating from college after 1950, those hired five or more years after graduation, evening school graduates, and those on leaves of absence. These exclusions reduced the study group to about 17,000.

An initial problem was to decide on a criterion of success in the business. The main criterion used in this study is the annual salary earned by a man as compared to that earned by others with the same length of service in the Company. Before making such comparisons corrections were introduced to adjust for differences between salary levels in different parts of the country and between different departments.

After these adjustments were made the salary distribution for each length of service was divided into thirds. It was then possible to say for each graduate in the study whether he fell into the top, middle, or bottom salary third of all the college graduates in the System who had the same length of service as himself.

An attempt was made to secure the verified rank in graduating class from the registrars of the many colleges from which the men in the study had graduated. The needed information was secured on approximately 10,000 men. The men were then classified as to the third of the class in which they graduated with an additional classification of those who were in the top tenth of their graduating class. A comparison was then made between these scholarship breakdowns and the salary thirds described above. The following table shows the results.

Rank in College Graduating Class as Related to Salary Progress

	Top Salary Third	Middle Salary Third	Bottom Salary Third	
Top Tenth of Class	51%	32%	17%	100%
Top Third of Class	45	34	21	100
Middle Third of Class	32	36	32	100
Bottom Third of Class	26	34	40	100

The table reveals a decided relationship between rank in graduating class and progress in the System. Fifty-one per cent of those who graduated in the top tenth of their class and 45 per cent of those in the top graduating third were in the top salary third; this compares to 26 per cent of those in the lowest third of their graduating classes. On the other hand, only 17 per cent of those in the top graduating tenth and 21 per cent of the top third were in the lowest salary grouping as compared to 40 per cent of those who had graduated in the lowest third of their classes.

These results parallel quite closely the results of an early Bell System study of the same sort reported in 1928. At that time, 48 per cent of the men in the highest scholarship third were in the top salary third as compared to 22 per cent of the men from the lowest scholarship third. At the other extreme, 25 per cent of the top scholarship men were in the lowest salary third as compared to 47 per cent of those ranking in the bottom third of their college graduating class.

Colleges, even accredited ones, vary tremendously in the rigor of their requirements for admission and for satisfactory academic work. This factor strongly suggests that the relationship between rank in college graduating class and salary progress might be even more pronounced if some account was taken of the quality of the institutions from which the men in the study graduated. Qualitative rankings of colleges are, however, hard to come by. For these reasons, a special classification of colleges was made for the purposes of this study. The classification was based on published materials and off the record discussions with college deans and placement directors. As a result it was possible to classify colleges as "above average," "average," or "below average." The following table shows the relationship between rank in graduating class and salary progress for men from the colleges in each of these three broad groups. In order to reduce the complexity of the table, the separate breakdown of the top tenth in scholarship has been eliminated and only the percentage of men achieving the top salary third is entered into the table.

Rank in College Graduating Class and College Quality As Related to Salary Progress

(Per cent of men in each category achieving top salary third)

	Above Average Colleges	Average Colleges	Below Average Colleges
Scholarship:			
Top Third of Class	55%	42%	40%
Middle Third of Class	38	30	28
Bottom Third of Class	31	25	23

It will be observed that taking college quality into account does make a difference. The middle third graduate from the above average school is in the top salary third 38 per cent of the time as compared to 28 per cent for average men from below average colleges. It is important to note, however, that scholarship is a more important factor than college quality. The top third men from below average schools, for example, have done better in the business than the lowest third men from the above average schools.

One other feature of the table is worthy of mention, in respect to both the scholarship and college quality classifications. The performance of the highest group exceeds the average group much more substantially than the average group exceeds the lowest group.

The difference between the performance of top third men from above average schools and top third men from average schools is 13 per cent (55 per cent minus 42 per cent), but this latter group exceeds the top third men from below average schools by only 2 per cent (42 per cent minus 40 per cent). Again, top third men from above average schools exceed middle third men from above average schools by 17 per cent (55 per cent minus 38 per cent) while the latter group exceeds bottom third men from above average schools by only 7 per cent (39 per cent minus 31 per cent).

A man's college grades are an evaluation of his most important activity during college - his academic work. It is widely believed, however, that a man's success in extracurricular activities may also be indicative of his future, particularly his success in business. The men in this study were, therefore, classified into three groups according to the extent of their achievement in extracurricular activities. The following table, therefore, adds one further breakdown to the data. The men are now classified by scholarship thirds, college quality, and into three groups depending on whether their campus achievement was classified as "substantial," "some," or "none." Again, only the percentage of men achieving the top salary third is entered into the table.

Rank in Class, College Quality, Extracurricular Achievement and Salary Progress

(Per cent of men in each category achieving top salary third)

	Top Third of Class Colleges			Middle Third of Class Colleges			Bottom Third of Class Colleges		
	Above Average	Average	Below Average	Above Average	Average	Below Average	Above Average	Average	Below Average
Campus Achievement:									
Substantial	67%	47%	50%	52%	38%	34%	37%	25%	26%
Some	61	44	37	42	33	24	32	24	18
None	47	37	37	35	28	25	31	24	20

The table demonstrates that extracurricular achievement is related to salary progress. In all nine scholarship and college quality groups (the columns of the table), those with substantial achievement have fared better than the other men. Extracurricular achievement is somewhat compensatory for lower rank in class. If only men from above average colleges are considered, for example, middle third men with substantial campus achievement have fared a little better than top third men with no achievement (52 per cent in the top salary third as compared to 47 per cent). Bottom third men, however, from above average colleges and with substantial campus achievement have made the top salary third only 37 per cent of the time. In other words, consideration of a man's campus achievements is helpful in predicting his probable success in the System, but it is not by any means as strong a predictor as his scholastic achievement.

The findings of the study strongly support the conclusion that scholastic achievement is a substantial predictor of progress in management in the Bell System. There can be no question but that college recruiting efforts will succeed more in their objective of bringing capable future managers into the business the more they emphasize rank in college graduating class as a criterion of employment.

Some Cautions About Biographical Data

Of late there has been a resurgence of interest among certain psychologists in the use of biographical data to produce an index of suitability for particular jobs. Some of this interest and the studies on which it is based seem to the present writer to contain two types of danger. One of these is that the biographical items may be prejudicial, such as the size of home lived in, the number of books in the house, father's occupation, etc. It would seem that every effort must be made to see that biographical data used either rigorously or informally be free of such implications. In our Scholarship Study, for example, although there was some statistical relationship between college quality and performance in the business, our recruiting policy is to ignore the question of college quality. There seems little doubt that college quality emerges as a predictive factor because, due to selective college admission practices, the students who go to some institutions have more mental ability than the students who go to others. We have, therefore, recommended to our recruiters that a general mental ability test be given to all college graduates in the employment process. The emphasis here is on the individual rather than upon the particular college which he has attended since it is clear that many students' choice of college is based on factors other than their mental ability and motivation.

The other danger in some of the current trends in so-called biographical data blanks is that some of the items are not, in fact, biographical but are really personality and attitude questions. Recent Congressional hearings have emphasized the point that whatever the predictive value of such questions may be, there is strong public resistance to their being part of the employment process.

Attrition

Although the use of objective measures like rank in college graduating class and general mental ability test score definitely do aid in the selection of a more promising group of college recruits, they are like all other selection methods - fallible. In our Initial Management Development Program the recruit is told that his first year in the business will be a serious trial period. He is informed that he will be given a challenging assignment under the supervision of a specially trained supervisor who is already a member of middle management and that he will be regularly and rigorously appraised as he carries out his work. The recruit is further told that if he does not appear under this scrutiny to have the high potential which he was thought to have at the time of employment that he will be told this and asked to leave. It is significant in this program that the supervisors to whom such recruits will report are especially selected and especially trained for this aspect of their job. Such an important evaluation is not left to just any supervisor and even those selected are worked with regularly to assist them in the proper observation and appraisal of their young charges.

The Assessment Center

In 1956 we started a long range longitudinal study of young business managers which we called the Management Progress Study. As a major research tool in this study, which is now in its eleventh year, we developed a business assessment center. In the course of operating this center in the research study, it attracted the attention of several department heads who saw it as a possible method for improving the selection of first-level supervisors. Certain modifications in the method were made to make it more appropriate for the actual selection of people, and a center devoted to this purpose was opened in the Michigan Bell Telephone Company in 1958. This first application was successful and today most of the Companies in the Bell System have assessment centers to process both male and female employees who are candidates for management.

The assessment center method involves (1) definition of the qualities relevant to performance in the job; (2) selection or construction of techniques for eliciting behavior representative of these qualities; (3) systematic observation of the resulting behavior by trained observers intimately familiar with job demands, leading to (4) judgments of the candidate's strength in each quality and in overall promise. In our case, observation of the job and intensive discussions with those who supervised the first-level job led us to select some 20 qualities (or variables) of importance in first-level management. These included such characteristics as leadership ability, administrative skills, decisiveness, independence, etc.

The major techniques at the assessment center are a business game, a leaderless group discussion, an individual fact-finding problem, an individual administrative task known as the In-Basket, an interview, and a few paper-and-pencil tests of knowledge and mental ability. Assessees are brought together in groups of twelve for a period of approximately two-and-one-half days. The assessment staff consists of seven or eight second-level supervisors, who have been first-level management themselves and who now supervise the first-level job, and a third-level director. They are given up to three weeks of training before beginning assessment work. After writing detailed reports about their observation of the candidates in each of the techniques, the staff meets to discuss each candidate in turn for a period of one to two hours. During this discussion, each candidate is rated on the 20 characteristics around which the assessment is focused and, finally, rated as to his or her degree of promise for a first-level management job.

Follow-up studies of the assessment process have shown that the method does, in fact, select a higher proportion of better-than-average first-level supervisors and also a considerably higher percentage of those who have potential for still further advancement. In addition, the method has proven to be highly acceptable not only to management but also to those assessed.

The management assessment centers described above have processed well over 20,000 men and women in the Bell System. All of these candidates have been those who have already been employed for at least several years by the business. Recently, however, we have developed assessment methods for the selection of salesmen. In this case, the process takes less time - a day-and-a-half. This sales assessment center has been applied to candidates for employment and it has been found possible to conduct assessment on a pre-employment basis.

Relevancy for Teacher Selection

The possible relevancy of the first two methods discussed above - biographical data and attrition - to teacher selection is obvious and it would seem that no detailed discussion is called for. One major problem, however, in using biographical data would be the necessity for it to be validated against performance on the teaching job. I gather, although I am no expert in this area, that criterion measures are not easy to come by and the lack of them has, in fact, been one of the major roadblocks in the path of improving teaching selection. I would like to return to this problem later, after I have discussed possible applications of the assessment center.

Two major components of successful teaching would seem to be knowledge of subject matter and the possession of those personal qualities essential to imparting that subject matter to students. Assessment methods could certainly be devised to measure such personal qualities. (It goes without saying, that achievement tests could measure subject matter knowledge.) Many of the qualities which we assess in the management assessment centers are relevant to the job of teaching. Among them are range of knowledge and interests, organizing and planning, personal acceptance and impact, interpersonal sensitivity, oral communications skills, ability to influence others, behavior flexibility, and so forth. It is important to note that the assessment techniques designed to reveal these qualities do not, for the most part, require job knowledge nor do they resemble the job. They, or techniques like them, could be applied not only to the job of supervisor but also to that of salesman, research director, army officer, or teacher, to name only a few.

The evaluation of people by means of such a technique is far more defensible and acceptable than the methods depending upon biographical items or ordinary aptitude measurement. The reason for this is that the assessment technique is similar to that of an achievement test rather than an aptitude test. It inquires whether the candidate can perform the job-like tasks before him not whether he has the aptitude for such tasks. If one fails, it is possible to make some developmental effort and try again. In the case of dead biographical facts or aptitude test scores, the individual has no recourse.

There may be impressive practical difficulties in applying an assessment center to applicants for teaching positions at the time of employment. Leaving expense aside, it would be impossible to staff up to assess all the candidates who would have to be assessed in the short period of the year in which recruiting takes place. It is for this reason that we do not use the assessment center in regular college employment. It might be possible, however, for prospective teachers to be assessed toward the end of their teacher-training, possibly by the training institution, and the results made part of the placement information provided by such institutions. It would also be possible, and this seems more feasible, for the teacher to be assessed during a probationary period on the teaching job. The assessment results could then be considered along with observations of the teacher in the classroom and other relevant information in making a decision as to whether to re-employ the teacher in the following school year.

Now to return to the question of criteria against which to validate such selection devices as biographical data, tests, etc., I would like to suggest that the assessment center can serve also as a criterion. I understand that in spite of many decades of effort, no satisfactory criterion of teacher performance has been found. Although it certainly would be preferable to have a good measure of actual performance in the classroom, improvement of teacher selection methods should not wait forever upon the development of something which may never materialize. As an alternative, one might accept as a criterion the degree to which the teacher possessed those abilities which teacher trainers, supervisors of teachers, and teachers themselves would agree were relevant to being a good teacher. You may remember that in our case we decided upon twenty such abilities in the managerial field. Assessment center procedures would certainly reveal the extent to which teachers did have these teaching abilities and would also certainly make it possible for teachers to be sorted into four or five groups as to their overall effectiveness. This classification could then be used as a criterion against which to validate selection instruments.

Personnel Selection Practices in New York City Civil Service

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Procedures Currently Utilized

The selection methods used by the New York City Department of Personnel do not differ greatly from those used in other civil service jurisdictions. Compared to industry, civil service selection methods tend to be more elaborate in form while more circumscribed in application for actual selection. The latter stems from legal requirements that civil service selection methods must be competitive in nature and reviewable by outside authority. These conditions force the use of a linear scale for overall evaluation of candidates rather than a multi-dimensional analysis.

The requirement of "reviewability" necessitates the use of relatively self-explanatory rating scales with considerable "face validity" and the production of reviewable records such as written test papers, rating guides, tape recordings, and work samples. Further, as the courts have taken it upon themselves to determine the acceptability and value of answers to questions and the level of performance before oral boards, we have been forced to shift our emphasis, to some extent, from the development of methods useful for selecting the best applicants to the development of methods which will not be challenged by the courts. However, within the narrow range allowed by the law and the courts, we use many selection methods.

In each case described, our tests are developed by examiners in the central personnel agency working from detailed job descriptions in consultation with people from the employing agency and with subject matter specialists.

1. Training and experience tests are used to reduce the number of unqualified applicants, to insure that those candidates who pass the other parts of the examination are able to perform the duties of the position and to predict comparable ability or competency on the basis of historical evidence.

   The requirements vary from "high school graduation" to a Ph.D. in a specified field plus X years of specified experience. In some cases there are fixed requirements which must be met. In others, there are many different sets of equivalents. The score on the test may either be "qualified" or "not qualified" or a numerical rating. The rating scales used to obtain the numerical rating may include in addition to credit for degrees and years of experience, evaluation of such factors as quality of performance in previous jobs and creativity as indicated by nature of publications. The candidate's statements, where these will affect his rating, are checked to the extent warranted. This may mean, in some cases, field investigations by teams of expert examiners.

In few cases, training and experience are the only tests. This is more frequently the case for high level positions where it is necessary to recruit as widely as possible, and to complete the process as soon as possible, and where an evaluation can be made on the basis of training and previous employment. These unassembled examinations have the advantage of not requiring candidates to come to New York City or to subject themselves to a formal test and to permit the completion of the selection process within days after applications are received.

While the use of an experience test for determining ability is probably the oldest form of employment test, is the most useful form to determine minimum acceptable competence in a restricted range of occupations primarily skilled crafts which require an apprenticeship, and has the other advantages noted, we have found it useful in most cases only for making gross discriminations among candidates. We tend to use only the most objective factors (school completion, etc.) and a fixed coarse scale by means of which superficially reliable ratings may be obtained. Once one raises the question of the equivalence of different courses of study in different schools and other questions of similar nature, it becomes impossible to develop a rating scale, let alone obtain reliable ratings.

Problems relating to the use of experience to predict future performance were recognized very early in the selection of public servants. During the middle ages, podestas, roughly equivalent to city managers, trained and experienced in city administration were selected on the basis of their records. However, they were usually hired, not as individuals but as leaders of a team of administrators which went along with them. We still don't know how to measure an individual's contribution to the success of a complex program. Unfortunately we are unable to make general use of the experience of the Italian city states.

2. Performance tests vary from testing a plumber's ability to wipe a joint and a welder's ability to make an overhead weld which will resist a given number of pounds of pressure, to the group oral type of combat or the ability to interview and calm an upset parent. We have also explored the use of the in-basket tests and other simulation techniques.

   Where the test situation accurately samples the future work situation and reliably measures the ability to perform the sample work, as in the selection for skilled craftsmen, typists, and stenographers, we have been reasonably successful.

   We are not as sanguine about our other tests of this type - particularly in supervision and management. A major reason why we are floundering is that, as indicated previously, we neither really know how to measure meaningfully management performance nor do we have the people who could apply the measures we have developed. The people who could use the measures objectively can't because they don't know the person's work performance well enough. Those who do, know the person too well to be objective. One advocate of the "in-basket test," frustrated by the fact that the ratings of observers of managerial performance are neither reliable nor highly correlated with ratings on the "in-basket test," has decided that the true measure of managerial ability is performance on the test and not on the job. On this basis, all tests would be valid. But then, this is the assumption that researchers in the training field make when they measure change in behavior resulting from training by change in test performance.

3. We make greater use of paper and pencil tests than of any other selection method. In form, they include just about every test type used anywhere. In content they range from simple one hour tests of literacy to tests running over two or more days attempting to determine how well candidates would perform, as the written test for Chief of the Fire Department.

Until July 1 of this year, almost all of the tests were released to the candidates. This made studies of difficulty, reliability and validity of little value. As the test questions were made public, "face-validity" was of paramount importance. The use of items not obviously job related although similar to those used in standardized tests for the occupation has on occasions resulted in attacks by employee groups, citizen groups, and members of the City Council.

4. We also conduct medical and physical tests. A qualifying medical test is part of every open competitive examination. Physical tests are used in selection for positions which require extraordinary physical effort.

5. A probation period, which varies from three to eighteen months depending on the job, is part of the selection process. Some agencies make effective use of this tool while others do not use it at all.

Validity of Selection Procedures

Before discussing validity of our selection procedures, it would be useful to describe our goals. In New York City as in other jurisdictions, civil service tests were introduced to take the selection of public employees out of the hands of the politicians. Without doubt, where used, our selection methods do this. Second, the selection methods must be honest. That is, no one should be able to buy a position on a civil service list. Except for a fewer than a half dozen minor instances over a period of over 80 years, we have been successful in accomplishing this. Third, the tests must convince the candidates and the community that they are fair. That is, that they don't favor one identifiable group over another in ways which are obviously unrelated to valid prediction of job performance. Although we have reservations about this, the community as a whole seems to be satisfied. And finally, the test should distinguish, in rank order, ability to perform the specific job while at the same time selecting on the basis of potential for advancement. As there is no possibility that universally acceptable criteria for job performance and potential for advancement can be established and successfully used for most of our jobs, it is obvious that we cannot measure the validity of the selection methods for the achievement of this objective.

Even if we change this goal merely to increase the probability that "competent" employees will be selected, evaluation is not possible. As not all candidates are appointed - either they fail the test or are not reached for appointment or refuse to take the job - it is not possible to compare the abilities of those who pass the test and those who do not. Despite these difficulties, we do carry on test evaluation activities.

1. We try to get from operating agencies as much feedback as we can on the performance of the employees selected. Prior to the preparation of any test, we try to get information about the performance of employees selected by the previous test. As might be expected, supervisors tend to be most satisfied with the skills of the craftsmen selected by performance tests. We recognize that even if agency evaluation of performance were valid, the level of this performance may be more a function of the nature of the labor market than the selection method.

2. We have made and will make routinely, now that our examinations are not released, studies of item difficulty, item - sub-test discriminating value and all other statistics which can be derived from test results. This has made it possible to compare the characteristics of our tests with those of standardized tests. We have, for example, on several occasions used the nation-wide test for Beginning Social Workers prepared by the Department of Health, Education and Welfare and compared the statistics obtained with those resulting from the use of tests prepared by our staff.

3. Some agencies have agreed to study test results. For example, the Department of Welfare made a study of the Case Workers appointed over a two year period to uncover relationships among such variables as test score, job performance, race, college attended, and turnover. On the basis of these results, we were going to do away with the written test. For a number of reasons related not to test-job performance correlation but to the other goals described previously, we were unable to do this. However, we are continuing our studies. Some weeks ago the Department of Welfare appointed approximately 400 Case Workers on a temporary basis pending the rating of the examination and the certification of the list. The Department of Welfare has agreed to keep close watch on the performance of these employees to determine whether or not there are any relationships between passing or

failing the written test and the other factors listed. For the first time, to my knowledge, in a civil service setting we will be able to compare the performances of all who passed a test with that of all who failed.

4. While technical validation studies are not feasible or profitable over the entire range of jobs for which we select, a rational questioning of all our assumptions and procedures is. At this moment we are examining our classification to determine, series by series, whether or not all classes of positions in a series are needed in the formal Civil Service sense of conducting competitive examinations between successive classes. If we conclude that they are not, we may dispense with civil service selection between some.

   We are also reviewing our experience requirements. It may be that our requirements have less to do with job experience and more to do with maintaining neat monotonically increasing progression between successive classes.

5. Factors unrelated to the test may influence the kind of person selected more than the test itself. For example, not all people who file for jobs take them when offered. The number who drop out of the market increases with the length of time it takes to make a solid job offer. How many are lost? Who are these people? How would they compare with those who are finally employed?

   Our Case Worker experiment has already told us that where less than 60% accepted job offers four to six weeks after they take the test, 95% accept on the day of the test. The nature of the job offered and work conditions obviously play important roles in self-selection. We are studying our technical and professional jobs to remove elements which could be performed by persons with less training. We hope to reduce our needs for skills in short supply and to attract more competent people to more challenging jobs.

   The labor market is a crucial factor; in some areas, we are looking for more people than there are in the market. In addition to job restructuring we have instituted formal trainee programs. For our own staff we no longer seek for people with experience or training in personnel administration. We recruit capable college graduates and train them to be personnel managers.

Relevancy of Our Selection Practices to Selection of Teachers

How relevant are these practices to teacher selection? While most of our practices are directly applicable in the recruitment and selection of teachers, it would not pay to discuss all of them as many are already in use.

1. The time gap between recruitment and job offer must be reduced to as close to zero as possible. In the school situation this means offering college students teaching jobs while they are still in school. In addition, use should be made of the "walk in" technique which we and other civil service jurisdictions have used successfully. This technique should be coupled with a selection method which would permit immediate selection or rejection.

2. The recruitment area should be broadened as far as possible. Some ways in which this could be accomplished, in addition to increasing recruitment efforts, are: using unassembled tests for selection of specialists; having other jurisdictions conduct tests; and accepting teachers qualified by other jurisdictions, perhaps subject to a probationary period.

3. Stop releasing tests. This will make possible the improvement of selection instruments through evaluation of test results, the reduction in the cost of the selection program, and the holding of more frequent tests.

4. Recruit college graduates without special training and education and provide the needed training after employment. Programs such as Head Start may make it possible to provide training and experience during summer vacations which might be given graduate credit. Employ those who are good teachers in this program without further examination.

5. Review all elements of the selection process and eliminate or change those which are not demonstrably helpful. Those tests which are not reliable should be discontinued or sharply curtailed.

   While I have not studied the matter closely, it seems to me a priori that the chance factor in classroom tests is too great for comfort. It might be better to use a one-term probationary period (perhaps as an assistant teacher) during which the new teacher would be under close classroom observation and supervision and would be helped to make the grade by an experienced teacher especially assigned for this purpose or by a supervisor.

6. Expend greater efforts on exploratory research. Attempts to evaluate and reach definitive answers at the present time is probably both wasteful and futile. It would be more valuable at this stage to spend some money to uncover the right questions rather than answers to the wrong ones.

The Relevance to Teacher Selection of Civil Service Personnel Selection Practices in New York State

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Introduction

Consideration of personnel selection practices in American civil service is fraught with the twin hazards of overcomplication and overgeneralization. One convenient generalization is that appointment or promotion is the responsibility of an appointing officer in an operating agency. His selection however is ordinarily limited to a small number of eligibles standing highest on an evaluative listing prepared by a central personnel agency for existing and prospective vacancies in a whole class of positions.

This separation of evaluative and selective processes derives from the constitutional doctrine of separation of powers of the legislative and executive branches of government. Civil Service laws at both State and Federal levels have been interpreted by the judiciary as a legislative restriction on executive powers. Provision of laws or regulations limiting the appointing authority to a single eligible have been held unconstitutional by both State and Federal courts. Consequently most American civil service systems have adopted the "rule of three" whereby the civil service agency affords the appointing authority a choice of three eligibles ranked highest among those available for consideration for a particular vacancy. Some jurisdictions have further widened the zone of consideration, in recognition that important factors may not have been assessed precisely or that there may be differences among positions in the same class or simply in deference to managerial responsibility. For some classes of positions the evaluative process itself may be shared with or delegated to operating agencies, subject to procedural standards prescribed by the civil service agency. In some jurisdictions and agencies, however, the executive branch has imposed on itself a "rule of one," with each appointment restricted to the highest ranking available eligible. Personnel shortages in many occupational categories have made most of these practices and distinctions largely academic.

Historically and traditionally the competitive civil service procedures were designed to set up waiting lists of many candidates for a limited number of positions which were more attractive than demanding. The competition contemplated was that of many candidates demonstrating their relative merit, fitness (and patience) for a few coveted appointments.

In recent years the public service has been engaged in an entirely different competitive situation, that of competing with other employers for a fair share of professional specialty personnel in scarce supply and a fair share of high potential beginners and generalists from larger and less specialized pools of manpower. A change in tempo has also been required--leisurely and elaborate evaluation procedures have been superseded by continuous recruitment and early offers of appointment.

The personnel selection process properly starts with attracting the attention and interest of sufficient numbers of apparently qualified personnel. If potential candidates are unaware of or unimpressed with or averse to the conditions and opportunities of employment, efforts must be directed to improving and publicizing attractions and to reducing deterrents. Salaries must be adequate, working conditions and fringe benefits must be competitive, and professional staff must be supported by sub-professional and clerical assistance so that they may devote themselves to the professional aspects of their jobs. There must also be reasonable opportunities to grow and develop on and off the job.

Unless and until the positions to be filled are able to compete for the interest of qualified personnel there is no point to elaborate evaluation and selection devices and procedures.

Selection Programs and Practices in New York State Civil Service

The New York State Civil Service system is concerned with entrance and promotion examinations, competitive and non-competitive, in the service of the State and in the service of many local units of government. The State service alone comprises roughly 100,000 positions in 3000 position classes. In addition, local jurisdictions and public authorities use the State's personnel examining services in keeping perhaps 75,000 positions filled in several hundred distinct classes.

Providing personnel examining services in establishing eligible lists to fill vacancies in these positions currently requires approximately 4000 examinations annually involving around 150,000 applicants. The number of applicants with which the State civil service examinations are concerned is in the same general order of magnitude as in the New York City civil service but the number and variety of position classes covered and numbers of examinations required annually are many times larger. Compared with the total Federal civil service system, however, New York State is concerned with only a fraction of the numbers of candidates, positions, position classes and competitions. The personnel operations of the Federal system are kept within manageable limits by geographic decentralization and delegation of responsibility for promotion and occupational specialty examinations to Federal departments and agencies. Compared with the separate offices of the Federal Civil Service Commission, Central and Regional, the New York State Department of Civil Service faces a similar total volume and variety of personnel selection problems in original appointments and a much heavier load in connection with promotion examinations.

Much of the State's examining program is concerned with levels and types of personnel whose recruitment and selection have little relevance to the recruitment and selection of teachers.

Examining prospective personnel for positions requiring little formal training or for which the labor supply is ample in relation to the numbers needed presents problems and justifies procedures presumably of little pertinence to the selection for positions requiring considerable formal training and for which the available supply of applicants compared to needs is limited in quality and numbers.

The State Civil Service Department has minimal responsibility for evaluating candidates for classroom teaching positions. Only in correctional, welfare, and mental hygiene institutions are there such positions under its selection program. Teaching positions in public schools throughout the State are under the jurisdiction of the Board of Regents and outside the civil service personnel selection system. The State Civil Service system, however, does include educational experts and supervisors in departments of education, State and local. The system also recruits and examines for many classes of professional personnel using methods and procedures possibly relevant to the selection of classroom teachers.

Most State civil service recruiting and selection examinations begin with a public announcement setting forth a general description of the positions to be filled, any restrictive conditions of residence, age or sex, the prerequisite education and experience required, the application procedure, and an outline of the nature and coverage of the various parts of the examining process.

Typically, there is a formal written test on a preannounced date at designated examining centers throughout the

State of New York and by special request and arrangement at centers outside the State. For higher level positions or those involving interpersonal skills the examination may include an oral test. For a limited number of classes of positions there may be a competitive evaluation of training and experience beyond that required for admission to the examination.

There may also be other parts of the examination. Promotion examinations always include added points for seniority at a preannounced rate of so many fractional points per year of service in the jurisdiction. They may include points for quality of job performance during the past year. Veterans preference credits are granted for a single occasion for each qualified wartime veteran who was a New York resident at entrance into military service. Medical and physical strength and agility tests may be required. Usually there is a verification of claimed education and experience and a check of police records and inquiry into records of physical disability, imprisonment or hospitalization for mental or emotional disorders.

Some or all of the various parts or stages of the examination may be administered as successive hurdles with only those passing an earlier stage admitted to the later or the various parts may be administered to all candidates allowing strengths on some parts to compensate for deficiencies in other parts. Some parts may be rated in three distinct scoring zones, clearly passing, clearly failing or conditionally passing.

The various parts of the examination are eventually combined into an evaluative listing or ranking of all the candidates passing the entire examination and surviving each part of the examination on which there is a required and preannounced passing mark.

In some examinations there may be more than one ordering or ranking of candidates, usually related to special requirements or options for some of the positions to be filled. Some candidates may qualify only on one of these options or specialties whereas others may qualify for two or more. There may be two or more levels of positions to be filled with some candidates willing to be considered or meeting educational, experiential or test standards for only one of the levels. A formal reranking or selective certification of eligibles for a class, a practice sometimes followed in Federal exams, U.S. and Canadian, is not allowed in New York State civil service examinations, although of course appointing officers who avail themselves of the choice of three or more eligibles within the consideration zone may in effect be reranking such eligibles in accordance with their conception of the needs of an individual position they are seeking to fill.

The written tests designed and used in State civil service examinations embody an attempt to effect a reasonable compromise between generality and particularity. The major emphasis has been concentrated on planning, developing and refining a manageable number of reusable multi-purpose tests which in various combinations and with varying weights and standards may be incorporated in many different examinations. Hundreds of position classes have important elements in common. Some knowledges and abilities are common to a number of classes at particular levels. Others are common to several levels of particular occupational families. Many classes involve such general functions as supervision, administration, research and statistics, interviewing, investigation, or report writing or such basic abilities as reading comprehension, verbal, quantitative and abstract reasoning, interpretation of tables and graphs, scale and instrument reading or spatial perception.

The State's selection program for professional and administrative trainees illustrates a number of features of possible application to the selection of teachers. The basic requirement is graduation from a recognized college. Subject matter knowledge is not directly tested but consideration for specialized positions is limited to candidates meeting relevant course requirements. A five-part differential aptitude battery is administered to all candidates using different weights and standards for groups of positions with different needs. The five parts of the aptitude test battery were derived from a battery developed for the Federal Civil Service where weights and standards for different professional classes were those which most sharply discriminated different levels of job performance among employees with war-service duration appointments. An oral test to appraise ability to express ideas and to deal effectively with others is administered on a pass-fail basis as a condition of appointment to positions of administrative trainee. Eligibles without postgraduate training or professional level experience are considered for trainee level appointments at a salary of $6300 annually which matures on completion of a year's service and on-the-job training to permanent appointments at a salary level of $6675 under present pay scales. Eligibles with postgraduate training or professional experience or with superior academic records may be appointed directly to the $6675 level.

The Validity of Selection Practices

The validity of selection practices may be defined in many different ways and different definitions imply different methods of appraisal. To attempt to generalize on the validity of a considerable variety of practices for the whole gamut of position classes in the public service would seem to verge on absurdity. Even when the appraisal of validity is limited to determining the correlation between a set of scores on a battery of tests and a set of independent observations of the major aspects of actual job performance in a single class of positions, the practical difficulties are formidable.

Broadly speaking, the validity of selection batteries for a single class of positions is limited by the following considerations:

a. The extent to which they make distinctions among applicants which are not relevant to differences in work performance.

b. The extent to which they neglect knowledges, abilities and personal attributes which are relevant to differences in work performance.

c. The extent to which unpredicted changes take place in the motivation and development of individuals between their evaluations as prospective and actual workers. The longer the interval before appointment the more important this factor becomes.

d. The extent to which unpredicted differences occur in the nature or conditions of work from time to time or place to place.

e. Errors of measurement or lack of reliability in the tests.

f. Lack of reliability or inter-rater differences in judging the quality of work performance.

The selection programs of the public service are not immune to these limitations. In attempting to minimize some of the limitations we undoubtedly magnify others.

When the reliability of the criterion (factor f) is in the neighborhood of .7 and that of the test (factor e) is .9, the highest validity co-efficient that could be expected would be .63 even if factors a, b, c, and d were ideal. When new test batteries are experimentally administered to present employees factors c and d are inoperative but correlations may be limited by restrictions in the range of present employees accomplished by the original selection process and by accelerated turnover of both poor and superior employees.

Multiple correlation studies between selection test batteries and overall criteria of job performance in the public service have occasionally yielded co-efficients of correlation as high as .6 but .4 is more frequent.

When we talk of validity of selection practices we presumably are concerned with considerations beyond a co-efficient of correlation between a set of predictor scores and a set of job performance criteria. The real value of a selection program lies in its effectiveness in attracting and securing the appointment of sufficient numbers of candidates who can and will perform required services at quality standards. This kind of effectiveness may be achieved with tests of moderate validity and may fail of achievement with evaluative instruments whose statistical validity is as high as fallible criteria will permit.

In the present state of the labor market for teachers, basic efforts are required to improve the inducements and reduce the deterrents for entering the profession, to identify teacher potential and to enlarge and improve training opportunities. Until these long-term goals can be accomplished, improvements in publicity and evaluative techniques cannot be expected to provide the quality and number of teachers needed to maintain, let alone expand and improve, our educational systems.

Selection Methods in the Federal Merit System

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Any discussion of selection methods in the Federal merit system, to be intelligible, must be made against a backdrop of understanding of the nature of the Federal service.

The outstanding characteristics of the Federal service are probably its size and its diversity. The executive branch includes about 2.7 million people working in literally thousands of different occupations. The programs administered by the various departments and agencies range very widely.

Federal employees not only deliver the mail and collect the taxes, they also forecast the weather; control air traffic; repair ships, tanks and airplanes; investigate, prosecute and imprison criminals; inspect and grade food; provide medical care; control plant pests and diseases; buy and sell all kinds of goods; etc. We even have a fairly substantial corps of teachers --- the primary interest of this conference. Most of the teachers in the Federal service are employed by the Bureau of Indian Affairs in the Department of Interior to provide education at both the elementary and secondary level to those Indians who are wards of the government on reservations throughout the country.

Another characteristic of the Federal service is the wide dispersion of Federal employment geographically throughout the 50 States and, to an increasing extent, overseas in foreign countries. This means that our system must provide felxibilities to permit adaptation of the basic system to the varying problems of different labor markets depending on the nature of the job to be filled and its location. Contrary to most popular opinion, only about 12 per cent of the Federal civil servants work in the Washington, D. C. Metropolitan Area.

The great bulk of the 2.7 million jobs are filled through the competitive civil service system. Because of the diversity of occupations and their geographic dispersion, as described above, it has been necessary to develop a system which, while it follows a common set of principles and broad policies, permits a great variation in the ways in which these policies and principles are applied in different places and in the filling of different jobs.

The basic principles which the Federal merit system uses in operating its competitive examining program are not unique to the Federal service. They are essentially the principles which underlie most merit systems in this country and in many countries. Therefore, there is no real need to elaborate on them to any extent. Fundamentally, they consist of the following:

a. Publicity must be given so that a reasonable amount of information is made available to citizens about the existence of vacancies.

b. Interested persons who have learned of the vacancy must have a reasonable opportunity to make known their availability for consideration.

c. Realistic, reasonable, and valid standards of competence and fitness must be applied impartially to all persons who make themselves available.

d. The standards must contain no test which constitutes discrimination based on factors other than competence and fitness. This includes the absence of any political test or political clearance of applicants.

e. Selection must be from among those determined on the basis of the standards to be most competent.

f. Each applicant should be able to learn what consideration was given to his application.

g. Each applicant should have an opportunity to request and receive an administrative review of the consideration given to his application.

The principles outlined above are applied, as indicated, in all of our competitive examinations whether they be for laborer, resident youth worker in the Job Corps, shipfitter, clerk, teacher, economist, or nuclear scientist. A very wide variety of selection methods are used in our total examination system. They include: (1) written tests designed to measure skills or knowledge, or to predict aptitude or learning ability; (2) performance tests to measure skill (in such disparate fields as welding or typing); (3) evaluations of experience or education based on application forms, samples of work, reference inquiries, qualifications investigation, etc.; and (4) oral examinations on a group or individual basis. The specific method or combination of methods used in any one examination is typically determined in advance by the process of occupational analysis leading to the establishment of the classification or position structure for one or more related occupations, and, at the same time, to the qualification standards to be used in filling the jobs.

For the purposes of this discussion it will be most fruitful if we concentrate on the nature of the examination and selection methods used for filling entry level professional and administrative positions.

The Federal government hires about 25,000 people each year who are entering into the beginning levels of a professional career. Broadly speaking, we follow two quite different techniques in conducting civil service examinations for these professional entry level positions. The first technique is one which relies heavily on a written test as an initial screening device. It is exemplified best by the Federal Service Entrance Examination, described in some detail below. The second technique is one which relies exclusively on an evaluation of the education and experience record of candidates. Both techniques require extensive recruiting effort to attract into competition as many top quality candidates as possible. We have long ago learned that good selection techniques cannot breathe quality into a lackluster set of candidates. Therefore, we consider recruiting a minimum essential to any successful selection program.

The Federal Service Entrance Examination

This single examination accounts for about one-half of all hires into administrative and professional entry positions. It is our best example of the first technique mentioned above, i.e., major reliance on a written test as an initial screening device. This examination is used for the filling of entry level jobs in over 100 professional or administrative occupations.

The kinds of jobs covered include personnel, budget, social sciences, administrative, supply, claims examining, writing and editing, etc. The examination process starts with the administration of a written test. This is a general abilities test designed to predict the potential of an individual to learn and develop on the job and to perform at a considerably higher level of responsibility after on-the-job training and development. Those who are successful on the written test, typically about 40 per cent of those who take it, are asked to submit an application indicating their background of education and experience. Special provision is made on this application for indicating the college work performed by course title and the grades earned in college for each course. Those applicants who make a sufficiently high score on the written test and who in addition have an academic record showing a B average or a standing in the upper 25 per cent of their class are eligible at the higher of our two entry grades, GS-7. Other eligibles are placed on the GS-5 list. Applicants who have additional education beyond the bachelor's degree or additional experience also may be qualified at the GS-7 level. (Purely on an experimental basis, this fall we are starting to waive completely the written test requirement for anyone who has a 3.5 grade average or is in the upper 10 per cent of his class, and who will be willing to accept appointment at the GS-5 level. Careful follow-up studies will be made on all appointees under this provision before making it a permanent feature of the system.)

The result of this process is the creation of a large list of eligibles (about 50,000 last year) which is then available for certification to different government departments and agencies as they decide to fill vacancies. Such an undiversified list would be of little use in matching individuals with specific job requirements; therefore, a careful coding of the applicant's background by subject matter area, based either on the nature of courses taken or the experience, is performed as part of the rating process. This information along with test part scores is recorded on punch cards. When an agency request for eligibles is received, specific job requirements identified by the agency are used to sort out those eligibles whose background or test scores most nearly match the needs of the specific job to be filled. Thus, this rather massive list of eligibles is used in a highly refined fashion in order to relate closely the job requirements and the eligibles on the list.

This program has been highly successful in terms of volume of competition we have attracted through intensive recruiting by the Commission and by the agencies. Generally, however, it has proved to be feasible only in those situations where there is not an extreme shortage of qualified people in the labor market and where the test battery used is reasonably related to the career requirements. There are many occupations in which the entry level jobs are filled in quite a different way; among these are teachers.

Other Entry Level Professional Examinations

Generally speaking, the entry level professional jobs which we fill by examinations, other than the Federal Service Entrance Examination, are characterized by shortage from the standpoint of the Federal service and most employers today. The primary areas of short supply in the Federal Government are such fields as engineering, the physical sciences, mathematics, accounting, etc. The examination system for these entry level professional positions in short supply has been one which has excluded the use of the written test as part of the evaluation process.

In the case of this kind of examination, it is quite evident that our real problem lies not so much in measuring the relative quality of those who apply but rather in getting enough qualified people for consideration. Therefore, the essence of the examining and selection function lies not in the detailed appraisal of individual backgrounds and the measurement of relative skill or knowledge levels but rather in the performance of a quality and effective recruiting job. The process followed therefore, for example in the case of engineers, is one by which the examination announcement specifies the minimum requirements of the job in terms of education or experience. The recruiter, who is usually an agency official rather than a representative of the Civil Service Commission, has been designated as a panel member of a board of examiners and is thus authorized to evaluate candidates as well as recruit. This recruiter then tries to do as imaginative and creative a job as possible in interesting potential applicants in considering employment with his particular agency. It has long been evident that in these areas recruiting is most effective when it is tied to a particular program. In fact, the most effective recruiting in many technical fields consists of describing to a class of seniors a fascinating technical problem which the agency has recently solved and not even mention the need of the agency for applicants. This kind of recruiting, of course, can be done most effectively by technical people experienced in the subject matter field for which they are recruiting. Frequently, teams are used in which the technical recruiter is joined by a personnel specialist who is expert in recruiting technique rather than in the subject matter field.

In this type of system in which the only basis we have for relative evaluation of candidates is their academic record or possibly some experience, we still face the problem of having to rank eligibles in their relative order of ability to do the work. In some cases, of course, this problem is not faced since it is not possible to have sufficient candidates to fill the jobs available; therefore, regardless of relative quality, all may be offered an appointment. If it is necessary, however, to establish a ranked list of eligibles we have devised rating schedules which provide for the uniform crediting of points to different types of backgrounds. Thus, for example, the graduate of an accredited engineering college will be given a higher score than the graduate of a non-accredited college who still meets the minimum standard. Likewise, the graduate with a high grade point average in his academic work or with other indication of academic excellence based on faculty recommendation or honors, etc., will be given extra credit and brought nearer the top of the list. This type of rating schedule serves an effective purpose in that it provides for a ranking that relates closely to those qualities which have been proven to be predictors of job success.

The key factors in a successful recruiting and selection program for entry level jobs in shortage category occupations are (1) interesting and challenging job opportunities, and (2) ability to make a firm job offer promptly. The Federal civil service makes this second factor possible by the technique outlined above; i.e., the agency recruiter being a licensed examiner can assign a rating and offer a job on the spot --- if he so wishes. If the shortage situation is temporarily or partially relieved, the recruiter's authority to make job offers may be limited to only those recruits who achieve above a particular score on the evaluation of education or experience. However, even this kind of mild limitation is rarely necessary in these areas.

Interviews

The selection method which I have talked least about in this paper is the one which is commonly considered to be the oldest and most widely used method of all --- the interview. While we still use the formal oral examination as part of the examination process in a very few situations in the Federal civil service system, we have been rapidly tending away from its use in this fashion.

This is not to deny the importance of personal qualities or attributes in the prediction of job success in many kinds of occupations. We believe that we can determine the degree to which an individual possesses these necessary qualities better, in most cases, by a carefully designed inquiry directed to former supervisors, colleagues, etc. than by an interview. Therefore, we have tended to put more of our resources into the better design of inquiry letters or into personal investigations than into improving interview techniques.

As a safety valve in the system, we do permit agency appointing officers to submit objections to an eligible based on the results of an interview performed as part of the appointing officer's right to select one of the top three names certified to him. If the objections are based on a carefully structured interview with adequate documentation that tends to show the candidate to be significantly lacking in necessary personal qualities appropriately measurable by the interview, we will support the objection. This practice has saved considerable time, effort, and paper work --- with no indication of abuse so far.

Conclusions

The above describes two quite different selection methods in wide usage in the Federal service for filling entry level professional and administrative jobs requiring college level background or equivalent. Both of these methods have been tested heavily in the intensive competition for quality personnel during the last decade. On the whole, while we are constantly changing and improving these techniques, they have both met this test very well. The Federal service --- while not getting enough top quality talent to meet our needs --- is getting its fair share of what is available.

The specific application of these methods to teacher recruitment and selection for a large metropolitan school system is a matter which obviously needs considerable careful study. Without knowing more about the way in which such a system operates, it would be presumptuous of me to make specific proposals as to the best combination of selection methods to be used for teacher recruitment. I feel strongly, however, that any thorough-going study designed to produce the most effective selection system has to approach the problem with a hard-hitting and searching analysis which gives full consideration to some of the possibilities suggested by this paper.

Impact of Critical Shortages on Teacher Recruitment and Selection Policies

William B. Brown

Los Angeles City Schools

Purpose of This Paper

This is a brief statement relating how the Los Angeles City Schools recently encountered major difficulties in teacher recruitment which, if not solved, would have resulted in seriously adverse effects on the pupils and the educational program, and how well-established policies and procedures were adjusted in the face of the crisis to meet staffing shortages. I hope the experiences which I will report here and our tentative conclusions will be pertinent to the objectives of this conference.

The questions we are seeking to answer are: What are the best steps to take to meet an anticipated, crippling shortage? What measures will bring the best results for the schools in the short period of time available? The answers vary considerably from district to district, but we hope there are some common elements on which mutual discussion will be beneficial.

Finally, this paper seeks to serve as an argument against too much rigidity in selection policy. Policy must be broad enough and flexible enough to meet a great variety of teacher supply-demand conditions--general oversupply or general undersupply; oversupply in some secondary fields and undersupply at the elementary level; oversupply in one part of the district and undersupply in another; keen competition with smaller, more attractive districts; or unexpected and sudden increases in demand as a result of enactment of specially funded programs with local, state, federal, or foundation resources. All of these require practical, vigorous, adaptable policies which will produce the greatest possible recruitment results in the limited time which is generally available.

The critical elementary teacher shortage which the Los Angeles City Schools faced this year is an excellent illustration of the type of staffing problem encountered and the procedures instituted to meet the situation. The findings and conclusions are based upon our experience with this particular shortage, and with other shortages experienced since World War II. These policies and procedures are fully developed in personnel guides. They are ready for immediate implementation, and are sufficiently flexible so that adjustments can be made in terms of a particular emergency and a particular kind of teacher which may be in short supply.

Los Angeles City Schools -- An Overview

A little background information regarding the Los Angeles City Schools, the second largest school system in the nation, may be in order here.

The district is responsible for the education of 13.5 per cent of California's elementary school pupils and 17.3 per cent of those in the junior and senior high schools. When the current school year started in September, Los Angeles had a total of 367,000 pupils in 428 elementary schools, 136,000 students in 71 junior high schools, and 128,000 in 53 senior high schools. Our total enrollment, including adult schools and junior colleges, is approximately 794,000, and is expected to go over the 800,000 mark next February.

Our teaching staff now totals approximately 31,000 including adult education and junior colleges. Our non-certificated staff now totals in the neighborhood of 20,000.

Unlike most other major metropolitan school districts which have large student populations and serve more limited geographic areas, the Los Angeles district serves a sprawling area of almost 800 square miles. Its service area is roughly twice as large as the City of Los Angeles and includes, aside from the City of Los Angeles, eleven incorporated municipalities and large sections of unincorporated County territory. On a north-south axis, one can travel approximately 60 miles from the northernmost school in the San Fernando Valley to the southernmost school overlooking the Los Angeles Harbor in San Pedro, and never leave the district.

The Los Angeles district serves areas of wealth, but it also serves major areas of poverty. Almost 200 of the 599 schools are located in "disadvantaged areas."

The implications and relationships of these characteristics to recruitment are many. I mention but one. This year, a surplus of teachers wished to work in suburban San Fernando Valley, a largely middle class, Caucasian area, whereas there were teacher shortages in some other areas such as the central city.

Teacher Recruitment Situation in Los Angeles

Since World War II, Los Angeles has experienced a shortage of teachers of one type or another almost every year. A serious elementary shortage existed for a number of years during and immediately after World War II. Then, there was a gradual improvement in the supply at that level between 1955 and 1960, while, during this same period, shortages began to develop at the secondary level. The latter have intensified and continued for most of the past seven or eight years.

September, 1965, was the first year since World War II in which Los Angeles did not encounter major shortages at the elementary or secondary level except, of course, in mathematics and one or two technical fields. This favorable situation was due to two major factors, an 11 per cent increase in district starting salaries for teachers, which brought the minimum annual pay to $6,120, close to the highest in the state; and a major change in State licensing requirements under a new credential structure. The large number of candidates was directly traced to the efforts of young people to qualify under the old credential structure before the new requirements went into effect. Had it not been for these two factors, the shortages experienced during preceding years would have existed in September, 1965. So for most of the period from World War II to the present, Los Angeles has had the challenge and responsibility of meeting teacher shortages of varying degrees of seriousness and type. The problem is not unusual in our city. Rather, it is a normal situation which must be continually faced by the personnel staff.

The Los Angeles district has shown a consistent annual growth, following the end of World War II, of from four to six per cent. Since the early 1950's, we have been faced with the task of recruiting an average of 3,000 teachers annually to meet growth and replacement needs. But, in preparing our recruitment program for September of the 1966-67 school year, we were certain of one overriding factor--this was to be no "ordinary" recruiting year, not that there ever is an "ordinary" recruiting year.

For one thing, our operating divisions gave us the task of recruiting a total of 4,500 new teachers for this school year. The unusually large demand was caused by the projected implementation of several programs of a compensatory education nature, to be funded out of state and federal resources.

Personnel staffs throughout the country are all too familiar with the problems incident to participation in state and federally funded special programs--ESEA and the Economic Opportunity Act, for example. These programs have added a new dimension to planning for school districts involved, generally because of delays in approval of legislation but particularly because of last minute "under-the-wire" administrative approvals from the funding source.

Aside from the uncertainties attributable to the implementation of special programs, Los Angeles recruiters were being asked to find the needed teachers in the face of a severe shortage of elementary teachers, the worst in many years, and it is to this problem that the remainder of this paper will be directed.

Elementary Teacher Shortage and Steps Taken to Meet It

The serious shortage of elementary teachers anticipated at the start of the spring recruitment drive was based primarily upon a 33 per cent drop in the number of elementary student teachers trained at the 12 colleges and universities in the Los Angeles area, which have been the source of two-thirds of the new elementary teachers for the District. Thus, this serious drop in enrollment, combined with a doubling of demand, pointed very clearly to a critical problem facing the Los Angeles City Schools.

Other factors which have had their effect on the number of potential candidates available can be traced to the implementation of new credentialing legislation. These include:

1. Lack of adequate, up-to-date information in out-of-state institutions concerning California credential requirements,
2. Requirement of a fifth year of college and a subject matter major for full credential status,
3. Difficulties out-of-state recruits have in obtaining graduate standing in local institutions and in obtaining needed courses to meet the requirement of a fifth year.

Our normal needs for growth and replacement have been approximately 900 elementary teachers for the fall semester of each year. This spring we were faced with the recruitment of an additional 900 teachers to meet the following needs for September:

1. Implementation of legislation which reduced class norms to 31 in grades one through three...293 additional teachers,
2. Additional kindergarten teachers to staff a district increase in the kindergarten program...54 additional teachers,
3. Additional teachers for Elementary and Secondary Education Act programs...92 additional teachers (600 additional had been employed the previous February because of ESEA).
4. Implementation of new state legislation which reduced the pupil-teacher ratio to 25 to 1 in disadvantaged areas... 462 additional teachers.

Intensified spring recruitment program: A number of steps were taken by the district staff to meet the anticipated elementary teacher shortage:

1. Recruitment trips to other parts of the United States were more than doubled over those of the preceding year; 200 campuses were visited this past spring as against 80 the year before.

2. Both local campus and out-of-state recruitment trips were scheduled at earlier dates than in preceding years to place the district in a more advantageous position.

3. The time for processing out-of-state recruits and making contract offers was cut in half over the preceding year. This time is now five to ten days from date of interview, depending upon when transcripts are received at the Personnel Division.

4. Credential service to new recruits was substantially increased, including information and explanation of new regulations, individual counseling, and evaluation of transcripts. This service was necessary to overcome confusion and misunderstanding concerning the new credential structure.

The results of the spring recruitment drive for new elementary teachers were disappointing but not unexpected:

1. Only 415 were recruited at local campuses, a drop from 600 the previous year. This 31 per cent reduction tallied closely with the drop in student teacher enrollments mentioned previously.

2. The number of out-of-state recruits showed a similar drop over the preceding year in spite of the expanded recruitment program. Only 150 elementary recruits were obtained from out-of-state sources this past spring compared with 240 the previous year. This 37.5 per cent reduction paralleled the reduction experienced by other Southern California school districts.

An additional 250 new teachers were obtained from three other sources: former teachers returning to the District; approved secondary teachers in surplus fields, such as social studies, who were found to be qualified for elementary teaching service; and a limited number of teachers from other districts in the state.

The spring recruitment drive thus had netted the district only 815 of the 1,800 new elementary teachers expected to be needed for the start of the fall semester. The personnel staff concluded that a critical shortage would exist this September unless emergency action were taken. Two steps were therefore taken:

1. A request was made to the State Board of Education for authorization for Los Angeles to use the provisional credential. (This credential in California is granted on an individual district basis when application to the State Board shows existence of a shortage and the fact that proper steps have been taken to meet the shortage. The credential requires the possession of a baccalaureate degree only; no teacher training is required.)

2. Plans were made for an intensive summer community recruitment drive to secure a minimum of 600 additional qualified teachers who might be employed on regular or provisional credentials. This drive was undertaken during August and early September. (Partial relief from the overall goal of 1,800 new teachers needed for the September opening of school resulted from a delay in implementation of one of the new state laws. This reduced the number needed by 400.)

The intensified summer recruitment drive was carried out with excellent support from newspapers, television, and radio. A community-wide appeal was made for qualified persons, housewives, and persons in other fields of work to respond to the urgent need for additional elementary teachers for the district. A special appeal was made to former teachers and to teachers on long-term leaves of absence to return to service this fall because of the shortage.

The response far exceeded expectations and was better than the response to similar drives held in preceding years: 900 applications were received, and 600 of the candidates were approved for contract assignment; 300 were employed on regular credentials, and 300 on provisional credentials. As a result of this drive, the elementary schools of the district started the fall semester with an adequate supply of new teachers.

For the second semester of the current school year, which starts in February, many more additional new elementary teachers will be required, 350 for growth and replacement, and 460 to implement the delayed specially funded state program for disadvantaged area schools. Once again, the Personnel Division will be confronted with the need to conduct a major recruitment program in the face of serious shortage at this level. Plans will be similar to those carried out during the summer months and will be conducted with every expectation of finding all or a major part of the new teachers needed.

The qualities we seek in all new teachers are:

1. Strong interest in boys and girls,
2. Knowledge of educational principles and practices,
3. Knowledge of subject matter,
4. Command of English fundamentals,
5. Good scholarship,
6. Ability to get along with others,
7. Appropriate appearance,
8. Pleasing voice and clear speech,
9. Ability to present ideas,
10. Alertness and maturity of judgment.

Initial employment screening procedures are exactly the same for all teachers--regularly credentialed or provisionally credentialed. It is emphasized that all of the 300 teachers hired on provisional credentials were required to meet the same district standards as regularly credentialed teachers approved on a conditional one-year contract basis, including:

1. A baccalaureate degree,
2. A strong college academic record,
3. Strong personal qualifications for teaching,
4. Passing of two objective tests,
    - a. English usage
    - b. Principles and practices of elementary education.

The only difference between these two types of teachers is in the credential requirement. The regular teacher entering service on a four-year or partial fulfillment credential basis must have completed student teaching or have had equivalent teaching experience. The provisional teacher does not have to meet this requirement. To offset this lack, the Los Angeles City Schools, whenever possible, require all new provisional teachers to undergo an intensive summer training, in the district, of not less than two weeks, and to serve the first semester under the close guidance and supervision of a master teacher. It is preferred that all new teachers successfully complete a full student teaching assignment before starting service. However, in an emergency such as the present one, when this is not possible for all new teachers, district pre-service and in-service training programs can provide much of the necessary technical preparation.

A seven-point district training program for new elementary provisional teachers includes the following:

1. Those hired prior to the opening of elementary school summer classes are required to observe and participate in these classes for a minimum of two weeks.

2. Those hired after the close of summer programs are given special orientation in the area offices.

3. All provisional teachers spend a minimum of two full days in area induction meetings with supervisory personnel prior to the opening of school.

4. Attendance in a semester-long in-service training course is required. This provides orientation to subject fields, methodology and curriculum of the Los Angeles schools.

5. A permanent regular teacher is assigned full time as teacher advisor to each ten provisional teachers. The teacher advisor works in the classroom with the new teachers and provides conference time for assistance with problems.

6. Each area supervisory staff devotes special attention to the needs of provisional teachers.

7. Principals give additional special assistance and guidance to the provisional teachers.

Current Problems for Recruitment Review

Each year new ideas and innovations are evolved to help meet critical staffing problems. The accumulation and use of this experience enable a district to face future shortages with considerable confidence.

It has become axiomatic, for instance, that policies must be readily adjustable to meet emergencies, no matter how short the warning. Also, selection procedures must be considered within the context of the recruitment function, for there is no value in having sound selection procedures if no candidates will apply for employment.

In "tooling" up to meet the year-by-year needs for new teachers, it is important that recruitment planning and research provide guidelines for future action. There is often insufficient study and planning behind emergency recruitment programs. There are a number of basic questions to which we need to give increasing attention, if planning is to be more effective. Some of these are as follows:

1. Has the job of the teacher changed significantly in recent years?

2. To what extent is discipline becoming a more serious problem than before and what implications does this have for the recruitment selection process?

3. Have criteria and specifications for selection been realistically revised in recognition of any important changes in the work of teachers?

4. Have teacher training institutions been effectively informed of changes in the teacher's job?

5. Has teacher training been modified to meet the changes in the work of the teacher?

6. Have these institutions recognized the great importance of preparing teachers for service in economically, educationally deprived, disadvantaged, or culturally "different" areas, and are the teacher trainees assigned to take at least part of their student teaching in poverty area schools?

7. Have the colleges informed school districts realistically in their appraisal reports concerning student teaching success in handling pupils in poverty areas?

8. Has recruitment been adjusted to meet changes in the nature of the teaching job?

9. Is a prime recruitment objective the selection of teachers who are qualified to serve in all types of situations in urban districts, or can the criteria be specialized to meet varying community needs?

10. Are all possible school and community resources being utilized for assistance in this recruitment process?

11. Are we learning about and profiting from the influences which lead teachers to select large urban centers and to make a life career of teaching in these centers; conversely, are attempts being made to ascertain factors which keep prospective teachers away from urban centers?

12. Have urban districts learned how to utilize recruitment to improve the image of the large city as a fine place in which to teach and live?

Need for more adequate supply-demand data: With current means of communication and data processing, monthly reports on both surplus and shortages should be provided to school districts on national and state levels. In Los Angeles, and in California generally, the current elementary teacher shortage could have been foreseen if all the pertinent data had been assembled and compiled in late 1965.

Events during the past year have made available supply-demand information completely inadequate. The war in Viet Nam with the attendant effect of the draft on teachers and prospective teachers, the civil rights problems in many of our cities, the specially funded programs to aid deprived areas--these and other influences are not readily translated into technical data. But translated they must be, and the data must be disseminated widely so that school districts and teacher training institutions may plan in advance to meet shortages most effectively.

Conclusions Concerning Recruitment Policies

Teacher shortages may not be as permanent as death and taxes, but, at least for the foreseeable future, recruiting of adequate numbers of well-trained teachers will be a perennial issue for personnel staffs of urban school districts.

The time has long passed when those of us in the personnel offices of big city school systems, particularly those cities experiencing periods of growth, can afford to "sit back" and wait for fully-trained teaching candidates to flock to our personnel offices.

Rather, we must formulate an aggressive, flexible, and comprehensive policy, which should be based upon the following facts:

1. Close working relationships between public schools, teacher training institutions, and the State Department of Education are essential to meet shortage problems. The greater the shortage, the more cooperative effort on an immediate day-to-day basis is required. A team approach is essential in coordinating credential policies, teacher training policies, district selection practices, and school staff requirements.

2. A large and excellent reservoir of potentially fine teachers exists in metropolitan areas such as Los Angeles, which can be drawn upon in times of critical need. This reservoir is made up of college graduates, housewives, and persons in other fields of work, who have excellent

scholastic records in college, the personal qualifications, and the background of experience for working effectively with children. This reservoir should be tapped without hesitation when it has been determined that the supply of regularly credentialed teachers is exhausted.

3. Television, newspapers, and radio stations can give very valuable help to a school district in a large metropolitan area, in recruiting needed new teachers from the ranks of housewives, recent college graduates, and persons in professional fields other than teaching.

4. Teacher salaries must be kept highly favorable. The minimum salary must be the highest or close to the highest in the state. This is essential if the largest city area and the largest school district are to compete effectively with smaller and more attractive suburban school systems for the limited supply of new teachers.

5. The well established screening procedures for the employment of regular probationary teachers cannot be allowed to interfere with the recruitment process in meeting critical shortages. At the same time, an effective, streamlined screening procedure must be utilized for initial employment on a contract basis to assure that district standards will be met. To state the matter bluntly, get the qualified recruit on the job first, then examine him closely for career status in the system. An important part of the screening procedure is the requirement that the formal examination must be passed during the first year of service.

6. The avenues of entry and recruitment contact must be manifold:

    a. District employment offices located at convenient places within the school system, not restricted to one central location,

    b. Interviews with recruits on all local campuses of major colleges and universities,

    c. Out-of-state interviews at recruitment centers and on college and university campuses in various parts of the nation.

    Such recruitment requires a minimum staff for year-round operation, and amplified staff for peak recruitment during the spring and summer months.

7. Employment standards should not be lowered even in the face of serious shortage. For our district, only one exception to this basic policy is made; that is, the meeting of the student teaching requirement. High selection standards are essential to preserve the educational program of the district. Recruitment must be intensified, salaries may need to be raised, processing of teachers may need to be streamlined, and pre-service and in-service help to new provisionals may need to be expanded; but under no circumstances should personal and academic standards be lowered.

8. Technical credential requirements, which may be very sound when the supply-demand balance is good, should not be allowed to stand in the way of recruitment in time of shortage. Temporary waiving of such requirements, however, does not warrant a district's lowering its standards in any way.

9. Resources of the supervisory and teaching staffs should be utilized to provide training and guidance for provisional teachers needed in an emergency. Lack of teacher training, including student teaching, is not an insurmountable obstacle.

10. Recruitment, above all, needs to be honest. If shortages exist only in disadvantaged areas, the community should be told this as frankly as possible. Recruitment should be undertaken directly and specifically to meet this shortage, seeking out the kinds of persons who not only have strong teaching qualifications, but also genuine interest in teaching in these areas of our cities.

Looking Ahead

1. Much more needs to be known concerning essential factors in successful recruiting of well qualified teachers for large urban districts. The entire recruitment function warrants greater study and research than it has received to date. Also, more research is needed concerning the most effective ways to screen and process recruits quickly so that they will respond to offers of employment from the urban district.

2. Much better state and national information on the teacher supply-demand situation is required. Speedier and more frequent checking, both with colleges and public school systems, are needed. The current elementary shortage is

a classic example. A telephone call to the 10 or 15 larger districts in the country in late spring or early summer of this year would have revealed that most had, or were anticipating, a serious shortage. The hurricane flag was up, the barometer was steadily falling, the supply-demand relationship was far out of balance; but it was "statistics" as usual. The supply-demand studies had been closed for the year. Clearly, a major overhaul and up-dating of our state and national information in this area is essential.

3. Large urban districts must have the necessary freedom to solve their own recruitment problems. Too many outside agencies are interfering. Those who are closest to the recruitment and selection of teachers and who live with the problems the year round and have them in sharpest focus, are the ones to take action and get the results. State and federal financial assistance is of increasing importance, but interference through technical credential regulations, such as exists in some of our states, is becoming a serious obstacle to achieving necessary recruitment results. There is a need for a study of the forces at work at the state level, which often become major problems for local school districts in carrying out their staffing responsibilities. Far too much staff time is now being spent in studying proposed new state regulations for support or opposition, understanding them after they are adopted, and making necessary adjustments. If local districts are given greater freedom and additional resources, the staffing problems of our large urban school systems will be effectively and promptly solved.

The task ahead will require our best efforts. One of the most valuable ways to meet it is to have the kind of pooling of experience among the great cities of the United States which this conference provides.

Desirable Policies and Procedures for Teacher Selection

George B. Redfern

American Association of School Administrators

That teacher selection procedures in public schools vary widely is an understatement of considerable magnitude. This variability is to be expected since the control of public schools in this country is so highly decentralized and local in nature.

In general, however, selection processes fall into two broad categories. One places a premium upon written and oral examination procedures; the other puts emphasis upon other less precise criteria and relies more upon the oral interview. At the risk of oversimplification, the former may be characterized by the term objectivity; the latter, subjectivity.

That one process is manifestly superior and more effective than the other has been argued for many years. During the early 1950's the proponents of "both schools of thought" used the agenda of annual meetings of the American Association of Examiners and Administrators of Educational Personnel[1] to debate the issue of examination-oriented selection procedures versus non-examination techniques. Neither side quite convinced the other of the superiority of its point of view. The great debate ended more in stalemate than in victory.

The use of well-designed, time-tested and carefully validated examinations in teacher selection in some school systems is justified on the grounds of historical precedent, legal requirement, urgent necessity or some other compelling reason. At the same time, other systems use different procedures, justifying their use on equally logical grounds. The point is that school systems are at different stages in time and circumstance in their developmental growth. They reflect unique local requirements and conditions. They conform to specific demands made of them.

The assumption is sometimes made that examination-oriented selection procedures are preferable, that they are more "scientific" and more effective in selecting good teachers than non-examination techniques.

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[1] Since 1959, called American Association of School Personnel Administrators.

If this assumption is valid, then it seems to follow that other systems should adopt more examination-type procedures. Why do they not do so? Is it the result of unenlightenment? Is it due to lack of professional resources and skilled know-how? Is there an insufficiency of commitment to sound personnel administration? Or is it due to other plausible reasons?

It is logical also to raise the question as to whether or not it is possible to increase the objectivity of so-called subjective selection procedures without, however, completely adopting specific examination instruments.

This paper is addressed to the consideration of the policies and procedures of teacher selection in the Cincinnati Public Schools where I was, until just recently, Assistant Superintendent of Administration and Personnel. Written and oral examinations are not employed in Cincinnati but care is taken to compile "subjective data" in a manner that will yield eligibility scores which make it possible to rank applicants so that those with higher scores can be employed before those with lower scores. Cut-off points are established to eliminate the marginal and weak candidates.

The purpose of this paper, then, is to show how so-called subjective selection procedures may be made objective, eligibility scores established, candidates ranked and selection may be made in terms of relative rankings.

Certification - Written and oral examinations are more necessary when qualifications for certification are being ascertained. On the other hand, however, many state departments of education grant certificates on the basis of approved patterns of preparation without requiring the candidate to take qualifying examinations.

In those instances, therefore, where state departments of education certificate teachers, it is possible to assume that some degree of selectivity has already taken place first, during the teacher education process and secondly, at the time the certificate is granted. This means, consequently, that the employing school system has some assurance that properly certificated applicants with sound preparation from accredited teacher education institutions have already been screened and evaluated to some degree.

The relevance of the above observation is that school systems not responsible for examining for certification have certain assurances about the relative qualifications of candidates without administering comprehensive testing procedures. Certification and credentials provide varying degrees of the necessary evidence for determining eligibility for appointment.

Preparation - While there is still considerable variation in the quality of preparation in different teacher education institutions, higher and higher standards of preparation are required in an increasing number of colleges and universities. NCATE[2] approved institutions have particularly high preparational requirements. Candidates from these institutions have been subjected to many measures of selectivity. This gives further assurance and removes some of the necessity to assume that total selection is the responsibility of the employing school system.

The Cincinnati Selection Plan

After applicants have been identified through recruitment efforts, a careful selection process is used to determine those best qualified for employment. The employment policy of the school system is to employ from the available applicants those best qualified to fill the positions which are open.

Procedure - Step 1 consists of processing the application. This involves inspecting the application form to see if it is completely and properly filled out. Care is taken to make sure that the record of past employment is complete, without gaps. A complete transcript of college credits is required. A copy of the teaching certificate is also required if the applicant holds one. If a beginning teacher, the applicant is required to show evidence of having fulfilled the requirements necessary to obtain the certificate.

Step 2 involves the processing of professional references. Evaluation forms are sent to all persons whom the applicant has given as professional references. Care is taken to ascertain if the names given represent persons who are in a position to give responsible, recent and relevant evaluations of the candidate's qualifications. If this is not the case, contact is made with the applicant for additional references. All references are then evaluated as described later.

Step 3 is the analysis of the application. The application, references, evidence of certification or eligibility for certification are analyzed to determine if the minimum standards for employment have been met or can be met.

Step 4 is the oral interview. If the candidate meets minimum standards on the basis of academic preparation and professional references and if vacancies exist for which he is qualified, an oral interview is scheduled.

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[2] National Commission for the Accreditation of Teacher Education.

When the interview is held at the headquarters of the Board of Education, every effort is made to have at least two interviewers. One represents the personnel office; the other either someone from the department of instruction or administration. Frequently, a principal is invited to serve on the interviewing team.

In campus interviews, the team interview is not always possible, although the practice of sending teams on campus interviewing trips is on the increase. In campus interviews, the oral interview takes place before the application is processed and credentials are received. However, care is exercised to study the available records on file in the appointments' office of the training institution.

Four factors are stressed in the oral interview:

(a) Scope and quality of training and preparation
(b) Aptitude for teaching and working with children
(c) Dedication and desire to teach
(d) Character, personal fitness and mental health

Determination of Eligibility - Upon completion of all application procedures, an eligibility grouping is determined for each candidate as follows:

Priority Group A - This is the preferred group and all candidates in this group are considered for employment before candidates in all other priority groups are considered.

Priority Group B - This group is considered as satisfactory, meaning that minimum employment standards have been met. Those in this group are considered after all those in Group A have been employed or have rejected offers of employment.

Priority Group C - These are the marginal candidates and are employable only in emergency situations. These applicants usually are lacking in one or more of the basic requirements for full contract employment.

Priority Group D - Persons in this group are not employable.

The following criteria are used to determine priority groupings. The first criterion is professional references. If an applicant has had no teaching experience but has completed student teaching, the references used are those of his cooperating teacher and the university supervisor. The references of experienced teachers must be only those administrators and supervisors who have observed teaching performance.

In case of an odd number of references, the median reference (in terms of score) is used. If there is an even number of references equally divided between two priority groups, the applicant is assigned to the higher group. Professional references are classified into four levels as follows: A-Outstanding; B-Strong; C-Acceptable; and D-Weak or below.

The second criterion is the oral interview. If there are three interviewers, the median rating is used. When there are two interviewers, and the ratings vary, the rating given by the representative from the personnel office shall be used. (The rationale for this determination is that the interviewers in the personnel office have been carefully trained to do interviews and on the average their ratings have shown greater validity over the years in relation to success in teaching.)

The four levels of the oral interview are: A=86 - 100; B=80 - 85; C=76 - 79; and D=75 or below.

The third criterion is the academic preparation of the candidate. The transcript of credits is analyzed. If the point hour ratio on the transcript is given (in most cases it is), the following scale is used to assign priority groups. In the event the point hour ratio is not given, it is calculated by dividing the total number of hours in the total number of quality points.

Overall eligibility groupings

1. The priority groupings for references, academic record and the oral interview are converted into points.

Priority Group	Points
A	3
B	2
C	1
D	0

2. The points for references, academic record and oral interview are multiplied as follows:

Points	
References	x 2
Transcript	x 3
Oral interview	x 5

3. The total points for references, academic record and the oral interview are added and an assignment is made to the proper priority group.

Priority Group	Total Points
A	26-30
B	16-25
C	6-15
D	5 or below

Health Examination - The offer of a position to an applicant who qualifies for appointment on the basis of references, academic record and oral interview is contingent upon passage of a physical examination. This must be given by a Board of Education physician, the physician-in-charge being a psychiatrist. If the individual fails the physical examination, the offer of a position is withdrawn.

In some cases, late in the summer and due to scheduling problems it may not be possible to get the results of the examination until after the individual reports to his assignment. When this occurs, it is understood that the appointment will be limited to one year with contract not being renewable.

Obviously, if the physical deficiency is of such a nature as to pose a risk to children, the individual is released and a replacement is obtained as quickly as possible upon receipt of the results of the physical examination.

Most of the physical examinations are given by general practitioners but the results of the examinations are reviewed by the physician-psychiatrist in charge. Thus, if there are symptoms of mental health deficiencies, the personnel office may be alerted so that appropriate action may be taken.

Periodic physical examinations are continued during the tenure of the teacher at intervals of three years. These may be at Board of Education expense, using the services of Board physicians or the individual may use his own physician provided the examination is reported on forms provided by the Board.

References - The three basic criteria in selection are the references, academic record and the oral interview. It is recognized that professional references vary in reliability. Some are relatively worthless; others are quite valuable.

Greater reliability is achieved by requiring the references on specified forms which can be analyzed and scored as has been earlier described. References are given the least weight among all the factors in recognition of their varying reliability, i.e., 20 per cent of the total.

Academic Record - Academic achievement, especially in student teaching, has proved to be a moderately reliable indicator of competence in teaching. There are exceptions to this generalization, however. Occasionally a candidate with excellent grades in college does not do well in teaching. On the other hand, one with average or slightly above average grades does very well in the classroom.

On the whole, however, the better the academic record, the more promising the prospects for success in the classroom. In weight, the academic record is given 30 per cent.

Oral Interview - The oral interview is given the most weight in selection, 50 per cent. Care is taken to see that it is thorough and consistently done. Multiple interviews are preferable to single interviews. Of the three selection factors used, it tends to have the most consistent and predictive value in forecasting teaching success.

No single criterion is adequate, however. The three factors in combination do the best job. Mistakes occur, on occasion, regardless of the care and fidelity with which the selection process is carried out. Pressure, rush of time and volume of work at peak periods in teacher selection introduce error. The incidence of that error, however, can be kept small by deliberate effort on the part of personnel administrators and examiners.

Conclusion

Much has been written concerning selection techniques and measures. Complete reliability and validity are difficult, regardless of the type of procedures used. Insightful personnel administrators and examiners can identify a number of relevant qualities that a good teacher must have. The problem is how to assess those qualities with certainty and consistency. This is the point at which difference of opinion exists and which is the concern of this conference.

Pre-employment selection, at best, can only be relatively successful. For this reason, it seems feasible to consider the probationary period as a part of the selection process. During the first three years of service, especially the first or second, much reliable "evidence" may be obtained which can be used to determine ultimate success in the classroom.

Selection policies and procedures must be continuously studied and tested for validity and reliability to the extent that this is possible. Most school personnel administrators and examiners are quite conscious of this imperative. As promising techniques are revealed through exchanges of information in conferences of this type, each school system participating is enabled to re-evaluate and refine its own procedures.

The great need is for more research and a greater exchange of information. There needs to be more dialogue among personnel administrators and examiners regarding the implications of this research and the data it reveals.

The Problem of Recruitment

Albert Schiff

Detroit Public Schools

At the time of this writing, the author was awaiting the results of last minute frantic Labor Day week-end recruitment efforts of our personnel staff to enlist the aid of qualified teachers in the greater Detroit metropolitan area to return to teaching and in some measure alleviate the teacher shortage--which in mid-August was over 600 vacancies in our elementary and secondary schools. We had just two weeks earlier made special appeals through the media of television, radio, and the press to enhance our efforts.

Some solace was found when he learned that other cities were in the same difficulty. The New York Times of September 4, 1966, reported that teacher scarcity in the public schools of our nation was the most critical in a decade. Its editorial of the same date stated that many factors had contributed to the scarcity. This was well known to school people throughout the country. But the editorial emphasized that educators ought to re-examine the supply lines in the light of their broadened mission. In brief, it noted that if present training facilities were numerically and qualitatively inadequate, then they must be reorganized, reformed, and augmented by new types of institutions, probably with federal assistance.

The gauntlet has been thrown to educators indicating that we should use the teacher shortage not as an excuse which besets many school systems--but rather should signal the need for a nation-wide analysis of teacher training and teacher utilization so that all levels of education can be assured of a steady flow of high quality instructors.

This is the crux of the entire area governing teacher selection and should pinpoint the direction we pursue for the future. For the most part, large city school systems set up screening devices and techniques to "weed out" the less qualified and less desirable teacher candidates who have already graduated from teacher training institutions. Boards of examiners and other personnel officials set up programs of testing, interviewing, examination of credentials, etc.--at great expenditure of funds--to insure that their school systems do not employ teachers who can give less than quality education to their students. This is deplorable especially at a time when staffs of this nature could be devoting their time and energy in working out newer and better ways and means of selecting teachers for the present and future.

At a recent seminar devoted to high priority areas in school personnel administration[1]--one of the speakers suggested that in the post-war years we haven't been too concerned with selection because of the acute teacher shortage and predicted that this would soon change. In fact, he quoted a personnel director of one of the California areas who said he wasn't quite sure that things would be any easier once there is an adequate supply of teachers. He felt he would find himself getting into more trouble when there are several teachers to choose from than when he was just lucky to get a position filled. I cannot share this optimistic view as it relates to large city school systems. In Detroit, for example, even if sufficient funds were available for the employment of teachers we need--it would be necessary for us to find approximately 2,000 teachers annually for the next several years to (1) maintain and expand current services, (2) provide for the normal leaves of absence, retirements, and resignations, (3) make provision for additional compensatory teaching staff in the lower socio-economic areas of the city, (4) provide for the expansion of the Federal Programs which augment and enhance our school program. These reasons, coupled with the potential loss of many male students who are being classified to I-A under current Selective Service requirements, convinces me and many others that the normal channels of teacher education--e.g., the four-year accredited teacher-training institution will not be able to meet the needs of our large city school systems in the latter decade of the sixties and the coming seventies.

Standards and Procedures for Teacher Selection

Standards for school personnel administration were clearly delineated in a bulletin issued by the American Association of School Personnel Administrators in 1960.[2] This bulletin stated that whether selection is the outcome of a carefully designed inquiry and evaluation or is based upon less thoroughly developed processes, certain facts should be known about a candidate prior to his initial appointment.

1. Investigation and Screening - The amount of information available on each candidate during the screening process determines the completeness of the preliminary picture of his abilities and has to represent what is

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[1] High Priority Areas in School Personnel Administration: Bridging the Gap Between Research and Practice. Edited by Harold E. Moore. Bureau of Educational Research and Services: Arizona State University, 1965.

[2] Standards for School Personnel Administration. American Association of School Personnel Administrators. The Association, 1960.

known about him. It becomes the foundation upon which a superintendent justifies his recommendation for initial or for probationary appointment.

a. The selection procedure is uniformly applied to every candidate prior to his appointment. The selection procedure is essentially the same for all candidates.

b. Prior to appointment to a position, information is on file showing the candidate's standing in:

   (1) Subject area competence.

   (2) Cultural knowledge in such other areas as constitute the school curriculum, e.g., English, science, mathematics, social studies, and such related areas as foreign language, arts, and music.

   (3) Professional knowledge, including history of education, child psychology and development, educational psychology, and such related areas as curriculum, guidance, tests and measurements, and methods.

   (4) Intelligence, alertness, or reasoning ability.

   (5) Physical fitness.

   (6) Mental health.

c. Written evaluations or descriptive reports on his practice teaching or full-time teaching performance have been reviewed.

d. College records are on file, including transcripts, personnel folder, and record of college activities.

e. Systematic and consistent means are used to assess "personality." Independent opinions should be recorded of at least three individuals as revealed through such sources as employment or performance records, college records of activities, and information independently solicited by the employer.

f. Ranked order score sheets or eligibility lists where used are developed from objective examinations or objective evaluations. Scores are not ordinarily influenced by letters of reference.

g. Score sheets or eligibility lists, where used, are made up of scores sufficiently reliable and valid to justify their use in promulgation of the ranked listing of candidates.

h. If scores are used to represent performance or findings and if such scores are so combined and/or weighted as to show ranked order of candidates on score sheets or eligibility lists, such sheets or lists are strictly adhered to in the employment of candidates.

2. Interview - The term interview here refers to the pre-employment interview as distinguished from an informal or introductory interview.

   a. The employment interview is conducted by at least three fully certified and experienced staff members who are well acquainted with the procedures and problems of the profession.

   b. Members of the interview committee represent not only the subject area concerned, but significant related areas or professional concern as well.

   c. The interview is designed to enable the prospective employer to learn those things about the candidate, such as personality, manner, and point of view, which may be only partly shown by his application and supplementary data.

   d. Instances where a single interviewer is authorized to employ an individual, the data collected for each applicant interviewed is inclusive and consistent. The interviewer has access to the professional opinion of at least two additional persons who know the candidate well.

3. Appointment - Initial screening and final selection culminate in the superintendent's recommending the candidate for appointment. Only the Board of Education has the legal power to make a contract with the candidate.

   a. The Board of Education entrusts selection of teaching and nonteaching employees to the superintendent through his professional staff and does not enter into the professional processes of initial, probationary, and final selection.

b. The public understands and the Board of Education assures that teachers are employed for their professional ability above all other considerations.

c. Appointments are made only after all phases of the selection procedure are completed; they are then acted upon with reasonable expedition.

d. Appointments are recommended by the superintendent and are consummated by the Board of Education.

e. Appointments are made in writing and constitute binding contracts between the Board of Education and the educational staff member.

f. The contractual agreement clearly indicates the nature of the appointment, whether probationary, regular, temporary, or substitute, and designates the term of service.

g. The appointee receives a copy of the pertinent law, regulation, resolution, or appointment action governing his contractual situation.

I would like to discuss briefly the method of selection of teaching personnel for the Detroit Public Schools. However, I do wish to call to your attention that this selection procedure is done after the college or university has had the student enrolled in their respective institutions anywhere from a period of three to five years. I include the selection procedure of Detroit only as an information item--which perhaps has some features currently in operation in other cities as well.

The selection of teachers for the Detroit Public Schools is a continuous process involving the services of staff members from the schools, the Division for Improvement of Instruction, and the Personnel Division. The primary responsibility for teacher selection rests with the Personnel Division.

Beginning with the completion of application forms, the process follows step by step to a final judgment on the part of the superintendent or his Personnel Staff member as he examines evaluation summaries of candidates recommended for placement or non-placement upon the eligibility lists.

Requirements for most teachers (other than emergency substitutes, vocational day trade, and building trades apprentice teachers) are (1) a bachelor's degree from a college or university accredited by the North Central Association of Colleges and Secondary

Schools, or an equivalent agency, (2) a Michigan State Provisional or Permanent (Elementary or Secondary) or Life Certificate, (3) a satisfactory college or university record, (4) a satisfactory record of supervised or directed teaching, (5) status as a native or naturalized citizen of the United States, or an individual who has filed his declaration of intention to become a citizen, (6) a satisfactory physical examination including a report on a chest Xray.

The requirements for employment as a substitute teacher are the same as for a contract teacher, except that seniors and post-degree students who have completed their student teaching satisfactorily may be employed as emergency substitutes while they are enrolled in courses necessary to complete work for their provisional certificates.

Applicants for teaching are asked to file the following credentials: (1) Application for a Detroit Teaching Position, (2) Transcripts of college records. It is the responsibility of the applicant to file his own transcripts. The applicant should request each college or university attended to send a transcript. This is necessary because, although credits transferred from one college to another are summarized on transcripts, the actual grades earned in each course are not furnished. Student copies of transcripts may be used in making application, but official transcripts must be filed before employment, (3) Recommendation folder from college placement bureau, if available.

Applicants who do not meet the above requirements are notified of the specific reason they cannot be considered for employment. As soon as enough credentials are received on which to base a judgment, applicants can be invited to participate in the selection process, and appointments for interviews are scheduled.

Bachelor degree recipients and graduate students of local colleges and colleges accredited by the National Council for Accreditation of Teacher Education participate in a special selection procedure and may be excused from the group tests provided they satisfy conditions shown below:

	Bachelor's Degree Recipients		Graduate Students
1.	The candidate was in the "Upper half" of his graduating class.	1.	At least 15 hours of graduate work with a mark of "B" or better.
2.	A mark of "B" or better was received in directed teaching.	2.	In undergraduate work, the candidate was in the "upper half" of a graduating class from an accredited college or university.

3. In undergraduate work, a mark of "B" or better was received in directed teaching.

Applicants meeting these requirements and who are recommended by their college officials may be employed on the basis of a committee interview at the Personnel Division, at a Detroit school, or at a college campus. "Upper half" applicants are usually interviewed by a committee of two, inclusive of supervisors, administrators, and/or members of the Personnel Division.

"Upper half" applicants not recommended for employment by an interviewing committee may be asked to participate in the regular selection process.

Applicants participating in the regular selection process are required to take the National Teacher Examination or a local battery of tests.

As a final step in the selection process, a meeting is scheduled with a Personnel Committee, usually consisting of a teacher and supervisor from the subject field; a principal, an assistant principal, or a consultant; a school social worker or a member of the staff of the Psychological Clinic; and a chairman from the Personnel Division. The selection committee reviews the college transcripts and recommendation folders, ratings, and test results. After the personal interview with the candidate, each member of the committee casts a secret, independent ballot rendering his judgment of the candidate.

The recommendations of the personnel committees are sent to the Assistant Superintendent and/or Divisional Director of Personnel for review and approval. His approved appointments are then presented to the Superintendent and then the Board of Education for official action. All candidates are notified of the results in writing.

Successful candidates are informed that they are placed on the eligibility list contingent upon the approval of a Medical Examiner of the Board of Education and the filing of an official transcript indicating a bachelor's degree from a university or college accredited by the North Central Association of Colleges and Secondary Schools or an equivalent agency, and a Michigan State Provisional or Permanent (Elementary or Secondary) or Life Certificate.

Candidates who meet the specific requirements for "upper half" candidates and are recommended by an interviewing committee are approved for placement according to the date the applications and transcripts are filed. Those who are approved by an interviewing committee contingent upon satisfactory test results are placed on the eligibility list according to the date of the test. Candidates whose test results are not entirely satisfactory meet a regular teacher selection committee. If approved, the date for placement on the eligibility list is the date of the regular selection meeting. Those not classified as "upper half" candidates are placed on the eligibility list on the date they are approved by the teacher selection committee.

Applicants who are not approved to participate in the selection process and applicants not recommended for employment by selection committees who believe their qualifications have not been properly evaluated may appeal to the Teacher Selection Review Committee.

Problems Affecting Teacher Selection and Directions for the Future

This now brings us to the core of the problem. Perhaps no profession has such a rate of turnover and mortality than the teaching profession. It thus becomes apparent that we must work out techniques of selection that would identify the candidate who has a commitment to teaching and subsequently remains in the field for a lifetime career. Selection procedures--as they pertain to personnel administrators--begin with the college senior. Although our selection procedures in Detroit are perhaps as adequate as most large city school systems, I question the continuing need for teacher selection by personnel administrators of school systems when the selective process for future teachers should begin much earlier than the college student approaching his senior year.

In 1965 a special committee of the National Commission on Teacher Education and Professional Standards studied the area of the assignment and misassignment of American teachers. It discussed the entire problem of staffing the schools with effective teachers, and came to the conclusion that this was a problem interlocked with several broader issues in American life. This report briefly discussed (1) the continuing and increased competition between other professions and the schools for the services of talented individuals and competition among school districts themselves, (2) the possibility of placing the right teacher with the right students at the right time when different school districts had conflicting social or intellectual goals, (3) the lag between curriculum offered in the colleges that prepares teachers and that offered in the public schools, (4) the increasing demand for teachers and teacher organizations placing a greater burden upon administrators to satisfy teacher's demands for proper assignments, (5) the question of whether colleges and universities offer adequate programs to prepare teachers to meet conflicting demands of the great cities and the rural areas, (6) developments in organization and technology create new and different positions for both professionals and nonprofessionals in the schools, (7) the influence of consolidation and reorganization of rural school districts on the preparation and proper assignment of teachers, (8) the misassignment of teachers as a result of insufficient numbers or the inertia of those who are principally concerned with assignment.[3]

The report concludes that these and other major questions do impinge and complicate the problem of staffing schools with effective personnel.

In Detroit we often are hurled the challenge--"Why can't we compete with the suburbs in terms of quality education, salary, etc.?" The sooner we face this problem realistically and indicate to all concerned that Detroit and other large cities are not suburban areas and that our teachers must reflect those ideals and characteristics which are necessary for effective teaching in a large, industrial, and cosmopolitan city--then and only then can we come to grips with certain basic procedures to be followed in the selection of our teachers for the future.

In Detroit, over the past few years, the Personnel Division has sponsored clubs of future teachers ranging from the elementary through the junior high and the senior high schools. In 1957, at the beginning of our efforts, only 12 high school clubs served 300 members. Now, over 4,500 pupils are participating in 161 local school units. An everage of 25 to 30 members is the usual size for these groups, although clubs range from as few as 8 members to 130 members.

Primary emphasis in the daily activities of club members is service to school and community. This is common to all levels. Since 1962 there has been a continuous increase in cadet teaching and tutoring which carries out a second purpose of the clubs, to familiarize students with the training, activities, and responsibilities of a teacher.

All levels explore various fields in education and help students plan for college. At the elementary level, this planning is often the simple but inspiring visit to a metropolitan university, a goal for the future. At the secondary level such visits crystallize specific enrollment plans and concern entrance requirements, programs, costs, and facilities.

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[3] The Assignment and Misassignment of American Teachers. National Commission on Teacher Education and Professional Standards. National Education Association: Washington, D. C., 1965.

The success of Detroit Future Teacher Clubs and those across the country is apparent in reading the credentials of beginning teachers interviewed at the colleges. An increasing number list Future Teacher Club membership as an extra-curricular activity in the high school.

Recruitment for the most part now begins with college seniors and student teachers. In view of shortages and other problems that face the large city this does not supply enough qualified teachers to meet the demands of our society. Recruitment should start with great emphasis at high school sophomore level. This can be done through literature and speakers to show pupils the new role and responsibilities that teachers must face for the future. In our schools we have thousands of young people working as Teacher Aides and/or are enrolled in work-study programs and other services which provide experiences that readily lend themselves to a good start for a future teacher. This could be augmented by meetings sponsored by the personnel division through conferences and city meetings and to enable service exchange experiences in different types of schools. Such experiences, plus the raising of aspirations and expectations, would be especially valuable with Negro youth. These experiences should not be confined only to the city but should be in the entire Metropolitan area.

Even in our society--as mobile as it is in terms of changes teachers make during the course of a lifetime--the greatest source of future teachers for any city rests with the high school students in the classrooms of that city today. I hate to use an old cliche but it is so true that--"The teachers of tomorrow are in our high school classrooms today."

The selection of prospective teachers then should be continued through college and the university level beginning at the freshman year. School systems should provide a coordinator to work with teacher training colleges in their area. The aim should be to help the prospective teacher, suggest shortage areas, provide child-study opportunities through classroom visitations, teacher conferences, getting jobs as camp counselors, securing employment in year-round youth groups, aid in materials for class term papers, etc. In brief, we must extend the services provided by teacher education and educational research divisions to the end that greater cooperation can be achieved between the school system and the teacher training institutions.

One of the outstanding developments which ought to be nurtured and developed in greater depth is the internship program as an integral part of the preparation for future teachers. The internship can be extraordinarily successful not only as a training device, but also as a means of achieving a functional partnership in teacher education and public school systems.

Michigan State University, in a bulletin describing its internship program, states that if the internship approach to teacher education is going to represent a significant step forward in teacher preparation, it should be incorporated in programs designed to meet certain criteria:

1. Internship programs, to have a real impact, must be brought into the mainstream of teacher education. Unfortunately, most internship programs now operating are on the periphery and include only an insignificant portion of the students preparing to become teachers.

2. To continue as a growing edge in teacher education, such programs must be designed so the internship can be self-supporting. Many such programs presently operating are dependent upon foundation or other outside support.

3. An internship program, to be worthy of the name, must provide careful and meaningful supervision of the intern by competent clinical supervisors. Without such adequate supervision, an internship experience can be sterile and lead to little professional growth.

4. The preparation of the intern prior to internship should approximate the preparation of any other beginning teacher. In the cooperative relationship with public school systems, teacher preparation institutions must remember the first obligation of the schools is to the youngsters in the classroom, not to teachers-in-training. Therefore, interns must be well enough prepared at the time they begin teaching to provide high quality instruction.

We should look favorably upon the use of Federal funds to help us in our search for quality teachers for the future. There is a vast untapped source of college graduates who could be encouraged to consider teaching as a career if we would provide the experience and training--while they are receiving reimbursement during the period they are completing requirements for full certification.

Special needs of a metropolitan system demand racially integrated school staffs and training of prospective teachers to meet the needs of "deprived" and/or "disadvantaged" youth.

We call upon teacher training institutions not to recommend candidates for teaching about whom there are any questions of general intelligence, competence, personality, or other factors which preclude success in teaching. School personnel administrators have a right to assume these candidates are ready to "tackle" the rigors of a classroom given the aid of adequate supervisory and administrative staff.

I believe large city school systems will need to modify rigid teacher recruitment and selection procedures to alleviate the teacher shortage by the adoption of temporary stop gap measures--while still attacking the problem of effective long range programs.

Criteria: Problems in Validating Teacher Selection Policies and Procedures

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Nature of Criteria

A good deal of confusion appears to exist with regard to just what we mean when the term criterion, or criteria, is employed. A criterion is simply a standard or bench-mark used to provide a frame of reference for judging or evaluating something. It may be thought of as a model against which comparisons may be made. Usually criteria evolve from common agreement about acceptable standards--regulatory boards for insurance, public utilities, banking, contracting, and such operate with a set of agreed-upon standards (criteria) as a model. In many circumstances criteria are arbitrary and relative to values that are held to be important by some particular group of persons at some particular time and place. Indeed, the matter of "values" and "value systems" is basic to the consideration of criteria.

In relation to teacher selection, just as opinions and preferences (values) of individuals vary with regard to the competencies and behaviors expected of teachers, the criteria against which teacher selection procedures should be compared will often vary (at least, in certain features) from community to community; and validity studies of teacher selection nearly always require replication adapted to the varying conditions.

In taking this position that criteria are determined by value contexts that differ among schools and communities, I am implying that the first step in the consideration of criteria against which to judge a teacher selection program must be to determine the expectations that are held locally with regard to teaching and teacher behavior. The extent to which there may be concensus about major issues, the greater the assurance with which a school administration or its educational researchers may approach the designation of criteria and their components, and the greater the possibility of conducting meaningful validity studies of teacher selection procedures.

I shall return to the relationship between criteria and value systems later, but I first would like to comment further on the nature of criteria--and the frequent neglect of and confusions about considerations relating to criteria.

Here I do not restrict my remarks to studies of teacher selection and research on teacher behavior; they are no more vulnerable than a great deal of research in the behavioral sciences where the problem of the dependent variable, or the criterion, has been neglected. From years of reading research reports and research proposals I conclude that many otherwise elegantly designed researches--well designed from the standpoint of sampling, control of the experimental variable and other independent variables, data analysis (and often involving real ingenuity of approach)--have, almost as an after-thought it seems settled upon some available instrument, or perhaps hastily thrown together some test, inventory, or other observational technique without great regard to its validity and reliability, proceeding on the assumption that such instrument satisfactorily reflected, and provided useful estimates of, the criterion behavior. This happens to be a pet peeve of mine--the fact that so many investigators seem to neglect or give too little attention to control of the dependent variable (criterion behavior) and that instead of considering this important problem from the very beginning of their research they appear to give it only cursory attention some time later in the investigation. I suspect in many such cases the researcher is introducing a source of Type II error; or when statistically significant relationships between experimental variables and the assumed dependent variable are obtained, the relationship really may be between the experimental variable and an unintentionally biased and unsatisfactory estimate of the criterion behavior. Although I feel my accusation is fairly generally applicable to research, it is one about which we teacher selection researchers certainly need to do some considered soul-searching.

Teacher Selection in Perspective

It seems to me there is some similarity between what we are interested in when we plan teacher selection procedures and subsequently study their usefulness and the sorts of things a curriculum developer is concerned with.

Typically, I believe, the planner of instructional techniques and course materials considers the ideal procedure to be followed as consisting of: (1) designation of course objectives, goals, and expectations; (2) breaking down the objectives into descriptions of (a) expected teacher behaviors and (b) expected pupil behaviors, i.e., the pupil behaviors it is intended the course or curriculum will help to nurture and develop; (3) planning and development of specific curricular materials and instructional techniques that are hypothesized to aid in developing the intended pupil behaviors; (4) selection of appropriate means of measuring the attainment of the behaviorally described objectives (Recall that any one of a number of methods may be used--e.g., measurement of samples of the pupil criterion behavior (samples of the expected pupil behaviors), measurement of aspects of teacher performance, measurement of teacher opinion about the efficacy of the program, citing of critical incidents, measurement of pupil behavior known to be related to the criterion behavior, measurement of pupil test response to verbally described situations related to the criterion behavior, etc.); (5) assembly of data (which may be in any of several kinds of units, scores, ratings, etc.) yielded by the measurement devices that were assumed to reflect attainment of the specified objectives; and (6) evaluation of the course materials and/or instructional procedures by drawing inferences from the collected data about attainment of the course objectives.

It may be laboring the obvious to spell out the closely related steps that are involved in the development of teacher selection procedures and their evaluation. Nevertheless I am going to describe what I believe to be a procedure that provides an appropriate rationale from which teacher selection should proceed. (Note that I consider this procedure to represent an "ideal" one--one which often cannot be followed step-by-step in practice. Practical considerations often demand that we skip early phases and proceed to set up teacher selection techniques on the basis of best available judgment--and I should not imply the selection procedures thus developed necessarily will be poor; they may be based upon substantial wisdom growing from experience, and upon testing them out they may be found to yield results that can indeed be shown to relate to valid criteria of teacher behavior, even though these criteria were not determined prior to the planning of the teaching program. I think we are getting the cart before the horse to develop selection procedures and then at some later time turn attention to the criteria to which we think these procedures ought to relate--but sometimes this is the best we can do.)

But let me get on to a statement of what I think we might agree would be a desirable way to proceed if we were operating within an ideal situation. It is a procedure that is fairly similar to the curriculum development paradigm I spelled-out a moment ago. I will refer to some ten steps or phases.

(1) Selection and designation of general aspects of the value system framework of the school/community as they relate to teacher behavior. I am referring here to the agreed-upon qualities that are desired, or expected, of teachers in a particular place and in particular kinds of teaching situations. (Note again that this process of arriving at criteria necessarily is subjective and a matter of the values individuals or groups of individuals may possess in common. When we designate criteria we

proceed from a context of an accepted value system. We view teacher behavior in light of a set of attitudes, opinions, and viewpoints that reflect the sorts of teacher behavior we approve and prefer and also the kinds of behavior we disapprove and find unacceptable. Value judgments and the value concepts and systems on which they are based grow out of highly personal biases, preferences, beliefs, opinions, and attitudes we hold as individuals. To the extent any group of persons share in common certain expectancies, preferences, or biases about teachers and teaching, criteria of teacher behavior may be defined for that particular group. Thus value systems concerning teaching, and criteria of teacher behavior, are likely to be relative rather than absolute. Although some "valued teacher behaviors" may be held in common by a large cross section of citizens and educators at a particular time, still other "valued behaviors" that must be taken into account in specifying criteria may vary from one community or school to another.)

(2) Identification of kinds of situations in which the agreed-upon "valued teacher behaviors" may occur--and in which they may be observed and assessed.

(3) Operational description (i.e., description in terms of actual teacher behaviors) of the agreed-upon valued behaviors that are to comprise the criteria of teacher behavior.

(4) Selection of methods of estimating the operationally (i.e., behaviorally) described valued behaviors. This is the problem of instrumentation relative to the criterion behavior and obtaining assessments of the criterion behaviors. (Assessment relates to quantified, or quasi-quantified, description. When we make an assessment of some characteristic of some thing or some behavior, we are concerned with the degree to which that characteristic is manifest.) In assessing some aspect or characteristic of the criterion behavior of teachers we are trying to estimate the extent to which that defined characteristic is manifest by some teacher.

(5) Identification of observable properties of teacher classroom behavior that may be related to the specified operationally described criteria (i.e., the descriptive cataloguing of teacher characteristics and behaviors that occur in the classroom).

(6) Development of selection instruments and procedures that are hypothesized to yield estimates that will reflect the operationally described teacher behaviors (criterion behaviors)--which, in turn, are assumed to reflect the value framework of the school and the community served.

(7) Assembly of data yielded by the teacher selection instruments and procedures noted in Step 6 above.

(8) Assembly of data yielded by the procedures used to estimate the criterion behaviors--Step 4 above.

(9) Analysis of relationships between estimates of the behaviorally defined criterion behavior and the estimates of teacher characteristics used in the teacher selection procedure.

(10) Evaluation of the teacher selection procedures by the drawing of inferences about the validity of those procedures for predicting the criterion behaviors designated in Steps 1 through 3 above.

Common Confusions in Dealing with Aspects of the Criterion Problem

One of the reasons we have difficulty with the criterion problem is that we sometimes fail to distinguish between different aspects of what is involved. We have all heard "principals' ratings" referred to as a criterion of teacher behavior. I think it is not nit-picking to note that principals' ratings do not constitute a criterion or a description of a criterion behavior. They are *one kind of estimate*, derived from one method of obtaining data that *may, under some conditions* perhaps, be related to some specified aspect of the criterion behavior of teachers.

Allow me to illustrate what I mean about confusion of terms with one or two examples.

Let us suppose the value system in a particular school community expects its teachers to possess some degree of capability with respect to "classroom management." We may think of this, I believe, as a criterion of teacher behavior in that community. It is, of course, a very generalized and abstract description of criterion behavior at this stage. Before we can proceed to observe teachers with respect to their capabilities for classroom management we need to specify still further the kinds of behaviors that comprise this domain and we need to try to determine either (a) samples of the criterion behavior that may in some manner be observed and assessed and/or (b) known or assumed correlates of this criterion behavior that may be observed and assessed. As one example, of many that could be used, we might choose the teacher's response to a situation involving activities on the part of some pupil that interfered with the activities of his classmates in pursuit of the objectives of instruction. We are still talking about criterion behavior but we now have broken it down into a description (although still somewhat general) of a sample of the criterion behavior. Now we might choose any one of several methods of estimating the criterion behavior under consideration. And the method we would use would determine, at least to a large extent, the kinds of assessments or estimates of the specified criterion behavior we would obtain. We might choose to employ direct observation of teachers in the classroom by trained observers, and one of the kinds of estimates we might obtain by such a method would be observers' ratings recorded on a scale representing qualitatively defined degrees of appropriate teacher behavior in the disciplinary situation referred to. Or, we might choose to use principals' recall of teacher behavior in situations involving classroom management and this method might yield estimates in terms of some sort of ratings, rankings, etc.

As a second possible example, suppose it was agreed that one aspect of the criterion behavior of a teacher should be his capability of communication of knowledge. In our attempt at behavioral description of the criterion, one aspect of communication of knowledge might be determined to be the teacher's behavior in a situation involving the presentation and explanation of specified subject matter content. (This could be made still more specific--we might specify behavior that emphasized clarity and directness of presentation, or perhaps subject matter depth, or absence of irrelevancies, etc.) In light of such criterion behavior we might resort to an observation method that involved the use of teacher examinations which would yield estimates of the teacher's knowledge and understanding of the specified subject matter. Or, we might again resort to direct observation by trained observers and obtain ratings, frequency counts, or other kinds of estimates. Or, instead of employing a sample of the criterion behavior of the teacher per se, we might choose to view the criterion in terms of known or assumed correlates of "teacher communication of knowledge." In this case we might choose to measure pupil knowledge of particular facts, principles, etc. that are assumed to be a product (at least in part) of the teacher's behavior in the communication of the specified knowledge. In this case as a method of estimating the criterion behavior we might elect to test pupil knowledge before the teacher presentation and immediately after presentation, obtaining estimates of the differences in test-estimated pupil knowledge before and after exposure to the teacher's presentation;

or we might test pupil knowledge before the teacher presentation and again after some specified period of time--to obtain estimates of the extent to which the teacher communicated knowledge was retained by the pupil; or we might use a method of determining the success of the pupil in later situations for which the specified knowledge is presumed to be a necessary prerequisite--such procedure yielding estimates based on test scores and grades in subsequent units of a course, in advanced courses, etc.

I have used these examples to help distinguish aspects of the criterion problem that sometimes are confused when we discuss such matters. The methods of estimation and the estimates yielded by different methods of estimating criterion behavior should, I think, be clearly distinguished in our thinking from the descriptions of criteria against which teacher selection procedures may be evaluated. The criteria themselves are the behaviors of teachers that are held to be of value. And of particular importance to validity studies of selection procedures, we need to recognize identifiable behavior samples and known correlates of the "valued" behaviors that are accepted as the criteria of teacher competency.

Some Considerations in the Designation and Estimation of Criteria

I would like now to note, at least in outline, some of the kinds of problems we must face in dealing with criteria. I will restrict my comments to two types of problems. One set of concerns has to do with (a) the validity of the description of samples and/or correlates of criterion behavior (i.e., the validity of criterion descriptions in light of the value system involved) and (b) the generalizability of descriptions of criterion behavior. The other set of problems has to do with the validity and reliability of procedures that may be used for estimating specified criterion behaviors of teachers. I shall mention, but not discuss in any detail, three different concerns from the standpoint of the validity of definitions and descriptions of criterion behavior in teaching.

One such area of concern has to do with judgments about the dimensionality of the criterion behavior under consideration: (1) Is the criterion behavior uni- or multidimensional? (Needless to say we usually agree that teacher behavior involves a number of dimensions that interact in complex combinations.), (2) How do behaviors that comprise important dimensions of teacher behavior aggregate--what are the behavior aggregates or patterns that really are relevant from the standpoint of teacher classroom behavior? What is the relative importance of various dimensions of criterion behavior in teaching--and how should these be weighted in criterion description?

A second set of concerns having to do with validity of the criterion description regard the logical consistency and interrelatedness of criterion dimensions--(1) How are the component dimensions of the criterion behavior patterned? (2) How do they overlap?

Still another area of concern from the standpoint of validity of criterion description has to do with the sampling adequacy or representativeness of the criterion dimensions that are selected to reflect criterion behavior. This is essentially the problem of trying to arrive at a criterion description that is as free as possible of bias. A number of sources of criterion bias were described almost twenty years ago by Brogden and Taylor in their classic article on "The Theory and Classification of Criterion Bias" (Educational and Psychological Measurement, 1950, 10, 159-186.) I reviewed the bias problem drawing heavily upon the insightful Brogden-Taylor treatment, and other considerations of the criterion, in The Journal of Genetic Psychology in 1957 ("Notes on the Criterion Problem in Research, with Special Reference to the Study of Teacher Characteristics," J. Genetic Psychology, 1957, 91, 33-61.) Since more detailed discussions exist, I will only remind here that in designating criteria against which to judge teacher selection techniques we must know how to recognize and must be constantly aware of conditions that may bias (and make useless) our criterion descriptions. I refer particularly to contamination bias, opportunity bias, experience bias, rating bias, deficiency (incompleteness) bias and distortion bias.

With regard to the generalizability of the criterion definition and description, (and here I am speaking of the replicability of the criterion description under different circumstances) I again note the relation of criteria to value systems espoused by a group and the probable variation in adequate criterion descriptions in different communities. We need be concerned whether criterion descriptions may vary from one kind of teaching situation to another for the same teacher and from one sample of teachers to another.

Once the problem of criterion description has been faced, we must deal with considerations relative to choice of the method or methods, of estimating the criterion behavior and the kinds of measurements or estimates that may be employed. Here again we are faced with the problems of validity and the reliability--this time, the validity and reliability of the instruments and the data they yield with respect to the criterion descriptions we have selected with view to their validity or relevance.

A variety of approaches may conceivably be applied to judging the validity of criterion estimates. Often the researcher concerns himself only with "face" validity, where the method for estimating the criterion behavior is superficially judged to be reflecting the criterion behavior it purports to measure. The behavior elicited is assumed to be isomorphic with the criterion behavior.

Sometimes an approach which I will refer to as "postulational validity" is employed. Here the method and estimates for assessing the criterion behavior are judged, in light of postulated relationship of the behavior elicited to the criterion behavior, to be measuring the criterion. Various sub-approaches to the determination of the postulational validity include: validity by definition; validity judged from the existence of reliable differences between individuals when the method is applied; content validity, or assumption of validity based upon estimates derived from selected samples of the criterion behavior; and validity in terms of conceptual consistency--validity of the estimation method judged in light of the apparent relationship between estimates provided by the method employed and some inferentially identified "construct" or behavior.

Further important considerations with regard to criterion estimates or measurements have to do with the reliability of data yielded by a particular method; and also with the feasibility, or practicability, of an estimating technique. Certainly these cannot be neglected.

Approaches to Criterion Definition and Description

Returning to the matter of descriptions of criterion behavior, I should like to simply note some of the approaches that may be employed.

Criterion description is basically a function of thorough and detailed acquaintance with the behavior we are dealing with--in this case, the behavior of teachers as they carry out the responsibilities demanded of them in particular school situations. Such acquaintance usually is best acquired by controlled observation. This is a particularly important consideration. Too often, I suspect, we try to accomplish criterion description by arm-chair and associative recall methods. The generality and usefulness of a criterion description is likely to be proportionate to the extent that essential details of the behavior under study have been identified and classified. And the most appropriate way of becoming knowledgeable about behaviors that may contribute to the criterion is by observation under controlled conditions.

Generally speaking, the usefulness of satisfactoriness of a criterion description will be greater when:

(a) the criterion behavior under consideration, or its products, can be operationally described, directly observed, and objectively recorded;

(b) the possibility of varied interpretations of the criterion behavior and its products by different individuals is minimum;

(c) the observations directed at the identification of criterion behaviors and the data based on observations are analytical rather than global;

(d) meaningful aggregates of the criterion behavior are distinguishable from irrelevant behaviors and attention is given to the determination of such behavior patterns;

(e) the investigator is cognizant of, and attentive to, the more prevalent sources of criterion bias (e.g., contamination by concomitant behaviors, by "opportunity," by experience, by rating sets, etc.; deficiency, or incompleteness of the criterion; and criterion distortion);

(f) observations directed at identification of criterion behaviors have been extensively replicated (e.g., an adequate number of individual cases have been observed and observations conducted in a variety of times, places, and circumstances).

And we must remember that underlying all criterion descriptions is the matter of identifying the prevailing values and expectations that form the context for, and dictate, the criteria we formulate. We must first seek answers to value oriented questions such as: Are teachers expected to be permissive with regard to pupil behavior? Are they expected to maintain rigorous standards of pupil learning and control? Are teachers expected to be rigid disciplinarians? Are teachers expected to be highly knowledgeable about subject matter content? Are they expected to be available repositories of subject matter knowledge, or are they expected to arrange for the pupil to "discover" information? Are they expected to take an active part in directing learning, or to arrange learning situations for individual progress? Are teachers expected to participate in administrative policies and decisions, or are such matters to be left to the administrative staff?

Obviously these are only a few questions illustrative of a kind that might be asked in trying to assess the value climate of a community or school. The questions referred to admittedly relate to global sorts of values--behavioral descriptions would have to be derived in greater specificity to be useful. Questions of this sort do not refer to all-or-none value judgments. They are not necessarily mutually exclusive. And the answers do not spell-out the behavioral criteria to be employed in judging the validity of a teacher selection policy or procedure. Nevertheless, such questions, together with many others, do provide the necessary first step of determining the value climate before the process of designating specific criteria can be engaged-in.

The actual description and definition of criterion behavior may follow a variety of approaches or strategies. All too frequently (or so it appears at least) no strategy at all is followed, i.e., criterion definition is completely neglected, or at best given only brief attention resulting in non-critical assumption of the criterion behavior involved. Among the studies I have reviewed I find practices covering a wide range of acceptability: completely non-critical assumption of the criterion behavior (either failure to consider criterion definition or unsophisticated acceptance of a criterion definition with no attention to its (a) completeness or (b) freedom from contaminating and distorting conditions); criterion description based upon analyses of judgments of presumably qualified authorities; criterion description based upon the analysis of responses to some response-evoking technique which is hypothesized to reflect some criterion behavior (here the criterion description is derived from the method of estimating the criterion--a procedure that should give us pause); and criterion behavior identified by analysis of records based upon observation of (a) behavior in situations presumed to involve the criterion behavior or (b) products of behavior in situations presumed to involve the criterion behavior.

Approaches to Obtaining Criterion Data

Assuming we can describe our criteria satisfactorily we can now turn to ways of obtaining criterion estimates, i.e., the basic records and indices of criterion behavior against which data derived from selection procedures may be compared.

As we have noted before a variety of methods of estimating criterion behavior are available--methods which vary in rationale and also in usefulness. May I just mention some of these in outline form:

Some methods of obtaining criterion estimates

A. Obtaining samples of the criterion behavior

1. Direct measurement of samples of the criterion behavior in process (i.e., on-going behavior)--primary criterion data.

a. "Natural" behavior--i.e., uncontrolled typical behavior

b. Standard samples of the criterion behavior

   (1) Direct observation and assessment of behavior (including interview) by trained observers

      (a) some observation approaches

         --Systematic, with immediate assessment (time sampling)
         --Retrospective (nonsystematic)
         --Analytical
         --Global
         --Relative
         --Absolute

      (b) procedures

         --Rating devices
         --Check lists

   (2) Observation and assessment of preserved records of criterion behavior in process (e.g., video tapes)

   (3) Assessment by untrained observers

2. Measurement of samples of products of the criterion behavior--presumed products of primary criterion data

   a. Direct observation and assessment of samples of behavior products e.g., on-going pupil behavior

      --Uncontrolled products (i.e., products in natural situations)
      --Standard samples of products

   b. Use of devices for immediately eliciting the products of criterion behavior

      (1) estimations of maximum performance, e.g., pupil test results

      (2) estimation of typical performance, e.g., pupil responses to personal reaction questionnaires (self reports of opinions, temperamental responses, etc.)

      (3) Measurement of (a) change in process, or (b) change in product

(a) change in estimates of samples of directly observed on-going teacher behavior

(b) change in estimates of samples of a presumed product of the criterion behavior, i.e., pupil behavior

B. Identification of correlates of the criterion behavior (i.e., behavior "in process" or products which may be used as signs of the criterion behavior)--secondary criterion data.

In my opinion the most valid of the various methods of estimating criterion behavior is that of focusing upon samples of the on-going criterion behavior and resorting to direct estimation based on observation of these samples of criterion behavior in process.

Ideally, in the study of the validity of teacher selection procedures one would prefer to work with "identical elements" of the criterion behavior in which he is interested--to directly observe and directly measure the samples of the criterion behavior on which attention is focused. We would like to employ measurements based on "work samples" or the "natural" or "typical" behavior in process, or, as a second best choice, upon similar observations of a product of the criterion behavior. In many cases I think we can accomplish our study in this manner. In others, it is true, we must be satisfied with the indirect estimates or correlates of the criterion behavior against to which judge our teacher selection procedures. Such correlates-type estimates may involve (a) behavior or products from simulated situations (e.g., performance situations, simulating those situations in which the criterion behavior occurs) or, (b) even presentation of graphic and/or verbal descriptions of situations involving the criterion behavior.

As I come to the conclusion of my remarks I feel a strong sense of inadequacy; of having bitten off more than I can chew. As is the case with most of you present, I have given a great deal of thought to the problem of the criterion, particularly as it relates to teacher behavior and to the problem of validity study of teacher selection devices. I find it easy to identify and recognize many of the problems and difficulties with which we are faced in trying to develop satisfactory descriptions of the criterion behavior of teachers and techniques which will yield valid estimates of the criterion behavior involved in teaching. I recognize the sources of bias in the description of criterion behavior and the conditions making for invalidity of the estimates yielded by different methods of assessing criterion behavior. But I am admittedly frustrated by the difficulties involved in obtaining criterion data which are, on one hand, *inclusive and complete* and, on the other, *exclusive and free of contamination*. I know it is not easy to lick these problems, particularly when we must frequently conduct validity studies in situations where we have been using certain teacher selection devices that were selected on a priori basis without the benefit of guidance of adequate criterion descriptions. And now, after the fact, we are faced with the problem of providing procedures that will yield estimates of criterion descriptions against which to test our selection data. I do not think the situation is an impossible one, but I cannot help but recognize, as I think most of us must, that we are faced with practical considerations which force us to compromise and employ make-shift methods that preclude the carrying out of validity studies of the quality we would like.

Some Notes on Validating Teacher Selection Procedures

Donald M. Medley

Educational Testing Service

As far as I know, all teacher selection procedures presently used are based on the model of aptitude testing; in other words, in constructing selection instruments the effort has been to devise a battery which would predict success on the job. Validation studies have, accordingly, sought to establish predictive validity against some kind of a criterion measure of teacher effectiveness obtained after the teacher has been admitted to employment.

A selection battery that could do this job fairly well would be useful indeed; it would enable the selection agency to compile a list of candidates with the candidate who would make the best teacher at the top and the one who would make the poorest at the bottom. Then it would be possible to appoint as many teachers as were needed in a given year, beginning at the top of the list, knowing that the best possible set of candidates had been chosen. This is a beautiful ideal; but it just will not work in practice. To my mind, the sooner all attempts to validate selection procedures in this way are abandoned the better.

In the first place, when you consider the nature of what you are trying to predict--teacher competence--it seems highly improbable that it can ever be measured with a paper-and-pencil test, or any other device which could conceivably be used on the scale necessary for teacher selection in large cities. There is considerable experimental data which confirms this pessimistic point of view. Most of the predictive validities obtained in studies done in the past have been below .30; very few have exceeded .40. And the improvement in predictive efficiency obtained with such small correlations is practically negligible.

In the second place, even if the correlations obtained were large enough to improve selection, their value would be suspect because of the limited validity of the criteria on which they would have to be based. At the present state of the art of measuring teacher competence, it is fair to say that the part of any teacher effectiveness criterion we can predict with a selection test is probably irrelevant to teacher competence anyhow.

Finally, it is extremely difficult actually to carry out a validity study based on this model, since to do so requires that--

for experimental purposes--a good sized random sample of all who apply for positions in a school system be admitted to teaching without any kind of selection. This is probably illegal, but in any case is not practical, in most large school systems.

A more fundamental reason for abandoning the aptitude test model is the fact that its use is based on an untenable assumption; the assumption that the major factors which determine whether a candidate will succeed or fail as a teacher operate before he enters the school system. Such things as what kind of a school and neighborhood the teacher is assigned to, the characteristics of his pupils and the facilities and materials available to him when he tries to teach them, and the amount and kind of support he receives from his peers and superiors in the school system are seen as distinctly less important than such things as what college courses he has had and what he learned in them, whether he has worked in summer camps during his undergraduate days, and how happy his childhood was, in determining his future as a teacher. This assumption is clearly implied by a conception of the selection problem as one of identifying among applicants for positions those predestined to become competent teachers.

It seems more realistic not to assume that the future of any of the candidates has been (or should have been) decided at the time when the selection takes place, but only that the candidates will vary in the degree to which they have mastered that part of their preparation which can be obtained before they enter the system. The selection problem would then be seen as one of assessing past learning rather than one of predicting future performance.

The problem of validating a selection battery would then become a matter of content validity rather than of predictive validity; and this kind of validity is much more likely to be achieved by a paper-and-pencil test or one of the other techniques which a practical selection battery is likely to contain. From this point of view it may be said that teacher selection should be based on an achievement model rather than a prediction model.

After a teacher has been admitted to probationary status in the school system, we are still faced with a problem of eliminating those candidates who have satisfactorily completed their preservice training but cannot teach successfully. This could be regarded as a problem in prediction; but I prefer to say that it is another problem in achievement testing. The first years of a teacher's career should be viewed as a part of his training; if by the end of his probationary period he has not learned to teach, he is not ready to be admitted to permanent tenure and should probably be let go.

If proven ability to teach were made a prerequisite for a permanent appointment as a teacher, some kind of a teaching test administered during the probationary period would become a part of the final selection procedure. This might be a formal affair involving the teaching of a standard lesson under observation, or an informal one involving ratings by supervisors. In either case, it should be a much fairer and more valid selection instrument than anything that could be used at the pre-service level.

If we adopt the achievement model for validating selection instruments as I have suggested, how can we find out whether our overall selection policies are achieving their ultimate purpose of improving the quality of teaching in the schools?

There is one approach to this problem which (so far as I know) has never been tried out. This approach would involve the continuous and routine monitoring of the quality of teachers in the school system. An analogy to quality control on an industrial production line may be drawn here. In industry, a sample of the objects being manufactured is removed from the production line at certain intervals for inspection. Such an inspection is much too thorough and expensive to be applied to every item which comes off the line; but if objects so examined are randomly selected, it is possible to obtain a quite satisfactory estimate of the average quality of the entire output by inspecting only a sample of it.

In similar fashion, the city school system could select a stratified random sample of all the teachers who earn tenure in the system each year, and make a thorough and careful study of each teacher after he has received tenure. The results of the study as related to any one individual would be kept confidential, and guarantees made that they would not affect his career in the system; but group data would be used to make inferences about the teacher population as a whole. Such data would provide precise information about the overall quality of teachers brought into the schools year by year, so that important trends could be detected; they would also provide diagnostic information about areas of strength and weakness on the basis of which changes could be made.

The fact that only group scores would be used would make it possible to employ instruments and procedures whose reliabilities are too low to be useful for individual diagnosis; and the fact that the number of teachers tested would be small relative to the total number employed in the system would make it possible to use relatively expensive and time-consuming procedures. Although we do not presently have the capability of measuring the competence of individual teachers reliably and economically, I am confident that we could reliably estimate the average competence of all the teachers in a system, using techniques already available to us, at a per teacher cost which would be quite reasonable.

I have introduced this idea of quality control of teachers in a system in the context of the problem of monitoring teacher selection policies and procedures, because that is our immediate concern here; but I would point out the obvious fact that such information would have many other uses, some of which might be regarded as more important than this one. I see no reason why all of these purposes should not be achieved at the same time. Nor do I see any other feasible way of achieving the one we are concerned with--that of assessing the effects of selection policies and practices as they are used.

Criterion Problems in Validating Teacher Selection Policies and Procedures

Harold E. Mitzel

The Pennsylvania State University

Instead of following my assigned topic for this brief paper with its emphasis on problems, and in order to stimulate discussion, I have chosen to propose a research and development procedure which would lead to a new set of teacher selection procedures. By adopting this stance, I hope to convey the notion that many of our so-called teacher selection criterion problems are of our own making and generally stem from an inadequate conceptualization of the task. My proposed solution is, I'm sure, not without difficulty in implementation. Further, I'm well aware that the proposal is deceptively simple, fantastically expensive, and politically difficult to bring about.

If we look at teacher selection as a data-gathering device instead of as a procedure, and if we view the result as multiple variables instead of as a single binary selected-rejected scale, then it is clear that we have been looking in the wrong behavior domain for the critically relevant information about teacher selection. Psychologically oriented disciplines have taught us that the best predictors of a person's future performance are variables based on his performance in a prior similar situation. Thus, we use a student's high school academic record as a major trustworthy indicator of his college success. In industry, the best predictor of performance on a specific job is the quality of a person's performance on previous closely related jobs. In the military, expensive simulators and training aids have been used as major sources of data for forecasting adequate performance under battle conditions. To be sure, the data derived from these sources are not perfect forecasters of direct on-the-job behavior, but as a class of variables they seem to stack up better than the currently used predictors of teaching success. The real problem of teacher selection is to choose from among all the candidates who have met the same eligibility standards (i.e., baccalaureate degree, passed a set of state-approved certification requirements) the ones who will provide the best pattern of teacher behaviors in the classroom. Of course, what teacher behaviors are wanted have to be identified and made explicit, but this task should be easily accomplished by the educational leadership in any given school system.

After screening out eligible teaching candidates with obvious physical and psychiatric defects, I consider that symbol manipulating ability as assessed by paper-pencil devices is the major variable which saturates the selection procedures of most large school systems. Systems that use undergraduate grade point averages as indicators of teacher quality are undoubtedly tapping the same academic variable. Large school systems that employ a written test, particularly the short answer variety, are banking on the same general factor, but attempting to measure it as reliably as possible. Indeed, many of the dubiously valid interview rating techniques require the rater to form some sort of global assessment of mental ability. I am not advocating the selection of unintelligent teachers for our schools, but it does seem to me that we have exhausted bookish intelligence in its wide variety of forms as a viable predictor of teaching performance. I am suggesting that we turn to measures of classroom performance derived from systematic classroom observation as a data source for improving the selection of teachers. I am reminded of an analogy recently in the news. For years the annual slaughter on the nation's highways has been attributed to a class of variables associated with the personal adequacy of the driver, but suddenly, in spite of the powerful propaganda influence exerted by auto makers, it becomes evident that there is an important class of accident and injury related variables directly traceable to the mechanical condition of vehicles and their lack of safety engineering. For teacher selection, we need to discover a whole new set of variables.

To exploit the potential of a new and different set of variables for teacher selection first requires a decision to quit trying to find valid predictors of teaching performance in school grades, interview rating scales, oral and written examinations and U. S. Office of Education guidelines. Second, we must attempt to develop classroom performance variables in the context of the classroom situation, thus giving ourselves an optimum chance of producing valid predictors. From the standpoint of the scientific approach, the procedure is straightforward and can be listed in eight steps:

Step 1. Develop empirical descriptions of classroom performance by systematically recording samples of observable behavior for existing teaching staff members. These objective records of teacher behavior may be process-oriented or content-oriented, and preferably both. It is extremely important that the arbitrary global evaluations of "good teacher" and "poor teacher" be avoided in any attempt to record teacher behavior objectively. The research on systematic observation reported by Withall, Flanders and Amidon, Smith and Meux, Mitzel and Medley, and Bellack would make good starting points.

Step 2. Construct a comprehensive sample observation instrument from the data obtained by Step 1. Here the judgment of educators who know the teaching process and the subject matter will have to be employed in order to select those behaviors which fit together to make up patterns deemed desirable by the school. For instance, if pupil participation in classroom activity planning is wanted in a school system, then it should be fairly easy to identify a cluster of *specific* teacher behaviors which clearly foster pupil participation. Conversely, a cluster of specific behaviors which inhibit pupil participation can also be identified. Experience shows rather conclusively that these behaviors can be put together with unit scoring to form a reasonably reliable scale.

Step 3. Administer the sample observation device to *all teacher* candidates in a naturalistic classroom setting (i.e., student teaching, internship). Of course, if some of the candidates are obviously unfit for reasons unrelated to their classroom performance (i.e., infection with a communicable disease, defect in moral character), then these may be eliminated in advance. This step is important since it enables the selection staff to obtain a wide range of behavior patterns. Research by Medley and Mitzel shows that it is necessary to obtain multiple samples of the observed behavior of a given teacher candidate in order for a reliable pattern to emerge.

Step 4. Employ *all* candidates. This is perhaps the hardest decision to make, even in times of a teacher shortage, but it is a necessary step in order to validate a new instrument.

Step 5. Systematically observe and score the on-job behavior of all teachers in the employed sample. The scoring should be done on *a priori* determined trial scales which were generated from the extensive observations of the behavior of in-house teachers. This step should be accomplished as soon as feasible after employment in order to minimize the self-selection effects of early dropouts.

Step 6. Using the observation data generated in Step 5 as a criterion and employing optimum weights for the several behavioral components, rank order the sample of new teachers and establish a trial demarcation between a satisfactory group and an unsatisfactory group. (The procedure itself does not demand that anyone be dismissed.)

Step 7. Analyze the pre-employment observation scale data against the on-job observation criterion obtained from the same individuals. This step makes it possible to assess the predictive power of the pre-employment observation information.

Step 8. Repeat the process beginning at Step 2 on a new sample of teacher candidates utilizing improved observation techniques and behavior scales.

Now the oversimplified eight-step process described above has a number of pitfalls. If the pre-employment teaching situation in which the predictive data are gathered has in it a lot of content-specific or situation-specific elements, then the predictors do not have a maximum opportunity to be closely related to the criterion. For example, if a candidate is observed during student teaching in a comfortable, middle-class, suburban school and then is measured on-the-job in a slum school, one would expect this difference in situation to have some impact on his instructional behavior pattern. Similarly, if the predictive measures for a candidate were obtained from a series of mathematics lessons and the criterion data were generated for the same person on several art lessons, some of the observed differences might well be attributed to the change in subject matters.

These problems of the specificity of schoolroom situation and content can probably be lessened by careful planning in large school systems.

That the use of classroom observation as a source of selection data would be a revolutionary development is confirmed by the recent survey reported by Gilbert and others. This 1966 report shows that, in almost sixty per cent of the large public school systems, candidates are not at all observed. In an additional twenty per cent, only one observation is made per candidate and the data derived from this procedure are undoubtedly a mass of subjective non-predicting rating scales which tell more about the rater than about the candidate. It seems to this observer that we must strike out in new directions on the task of predicting teacher performance and discontinue our perseveration with unproductive sources of data.

Needed Research in Teacher Selection

John C. Flanagan

American Institutes for Research
in the Behavioral Sciences

This discussion of needed research in teacher selection will discuss research needs under four main headings. These are (1) the determination of the pattern of teacher behaviors which defines effective teaching, (2) the evaluation of the effectiveness of teaching performance, (3) the prediction of teacher effectiveness, and (4) factors which cause good teachers to leave teaching.

It is proposed that research on determining the behaviors which constitute effective teaching be given a new orientation. The principal characteristic of this new orientation is that instead of a single set of specifications for the requirements of an effective teacher, there should be a very large number of sets of requirements defining the behaviors which make for effective performance of each of the various aspects of the teaching task. Although such an analytical approach has advantages under any circumstances it becomes of great importance in the situation where the activities of the teacher are likely to change markedly with the advent of new teaching methods, new objectives, new technology and the provision of clerical assistance by computers and teaching aides.

Effective teaching in the past has involved many activities, such as lecturing, maintaining discipline, leading discussions, checking on students' learning, correcting students' errors, stimulating students' thinking, and arousing students' interests. Although many of these activities are likely to be important for effective teaching in the schools of the future, it seems probable that there will be considerable change in emphasis. More importance will be given such activities as individual tutoring; assisting students to plan their educational program; developing a sense of responsibility in the student for his own educational development; helping him to discover his interests and special abilities; helping him discover the satisfactions that can be obtained from creative activities; and assisting him generally in his personal and social development.

Since it is unlikely that most of us will be able to predict the precise nature of the teacher's role and activities in the schools of the future, it is of considerable importance that we carry out research to define the requirements for effective teaching of many kinds. It is also important that in gathering this information the characteristics of the individual student involved in the teaching activity be clearly specified. It seems likely that the requirements for motivating one type of student are likely to be different from those for motivating another, for example.

In carrying out research in this field, it is proposed that task analysis procedures and the critical incident technique be used. These can be supplemented by other observational and analysis procedures. A device which has already shown its value in this type of research is the video-camera which can capture the teaching situation and play it back for observation and analysis as many times as is required. The procedures of task analysis are likely to be of special value in developing requirements for new types of teacher activities. Of course in using this procedure, the characteristics of the student, his previous knowledge and many other factors can be specified and varied at will. The critical incident technique also makes possible the detailed description of the specific student involved and the definition of the particular aim of the teacher's activities. It should be of great value to collect many thousand incidents each of which is classified according to the type of student and the specific teacher activity involved.

The second area of needed research is in the evaluation of the effectiveness of a teacher. Of course in this case also, the focus should be on the effectiveness of the teacher in each of a wide variety of activities with each of a number of types of students. Teacher effectiveness may be evaluated in terms of either the process or the product. As assessment procedures are developed which measure all of the desired changes in student behavior, and computers provide efficient storage and analytical procedures for these data, it seems likely that much more detailed records can be collected and analyzed than has been characteristic of past evaluation procedures. It appears that if individualized educational development procedures are used which set specific obtainable tasks for each student, the details of whether a particular teacher's students obtain the goals specified will provide a much more precise record of teacher effectiveness than has been previously available. High priority should be given to research and development work on procedures for a comprehensive evaluation of the teacher's effectiveness in many activities with many types of students based on systematic measurement of the effectiveness of the instruction.

It also seems desirable to continue research on process variables in teaching. It is suggested that the most promising lines of research on process variables involve systematically developed observational record forms on which specific observations by a competent judge are made of effective and ineffective performance on the part of a teacher. These, of course, should be related to the particular activity and the particular type of student involved.

A factor which could have considerable influence on the quality of teachers is the use of merit increases and the assignment of tenure status only as a result of demonstrated effectiveness. The lock-step promotions characteristic of many school systems and the failure to eliminate the ineffective teachers produce a situation attractive only to the mediocre and marginal teachers. Of course, improvement in these areas must be based on valid procedures for the evaluation of teachers. Research on the evaluation of teacher effectiveness should be given much attention for another reason, which is its essential importance to other types of research on teacher selection.

The third area of research relates to the development of predictors of effective teaching. It appears that long-range follow-up studies are among the most promising approach to this problem. It is anticipated that data from students tested as 12th graders in Project TALENT who have graduated from college and entered teaching will become available this fall. Similarly, in the next three years data from other classes will be collected and analyzed. These data should be of distinct value in defining the type of individual who enters a teaching career. Of even greater value will be the ten year follow-ups planned for Project TALENT which will begin in 1970. These studies will provide data on those who have not only selected careers in teaching but also have been found to be effective teachers over a substantial period of service. As in the case of the other types of research studies mentioned, it seems important that predictors not be focused on the quality of teachers in general but rather the effectiveness of the teacher in performing specific roles or activities. It is also believed that the trend in research with respect to predictors will be in the direction of a very large number of specific predictors rather than a few more general measures.

The last area of needed research relates to the conditions of teaching with special emphasis on those which have negative selective value. It is well known that the turn-over in teaching is very high, and it seems important to determine why teaching loses some of its most effective individuals. One of the problems calling for research in this area is the effects of family duties on remaining in teaching. It would seem worthwhile to study the question of whether part-time employment or somewhat less than full-time employment might retain some of the better women teachers. Other research topics in this area relate to the study of specific teacher activities, particularly with the view to determining whether or not some of the clerical and administrative duties could be performed by teacher aides, clerks, or computers.

Another valuable study might be directed at the question of "why many promising young teachers leave teaching early in their careers." It seems likely that the administrative practice of assigning new teachers to difficult classes, loading them down with the more unpleasant extra-curricular assignments, and similar procedures which give the new teacher a bad initial impression of teaching are responsible for losing effective teachers.

In conclusion it is believed that the new methods of teaching will make it possible to evaluate teaching effectiveness much more precisely than has been the case in recent years. This will make research on the characteristics for effective performance in specific teaching tasks both feasible and important. As proposals for new educational programs are developed they should be accompanied by plans for research on the teacher's role and activities in the new program. Perhaps one of the greatest needs for research in teaching is the application of systems concepts to the teaching and learning system. This application would include comprehensive measures of the input and output of the system as well as studies of the process variables. For such studies to be effective much better measures of the input and output of the system in terms of assessing the students' behavior, concepts, and abilities will be required than are now available. Perhaps the first step in a program of teacher selection should be the definition and development of measures of the products of teaching. Unless we have valid measures of the effectiveness of a teacher's efforts, other types of research must be regarded as tentative, exploratory, and perhaps in many cases, trivial.

Needed Research in the Area of Teacher Selection

Harry B. Gilbert

The Pennsylvania State University

I Assumptions

There are three basic assumptions that underlie the specific proposals I shall outline. Permit me to make them explicit.

1. Interest in the area of teacher selection is minimal based upon the actual amount of research under way. However a great deal of interest does exist among teacher personnel selectors and universities. The problem is to make patent what's latent.

2. Professional teacher selection practices are rarely employed. In large school systems that presume to be using selection techniques, screening is actually what is done. In smaller, affluent school districts, hunch rejections and global perusals, sometimes in actual observations, serve as selection techniques.

   A moment's reflection on the current shortage of teachers, particularly in those school districts perceived to be "tough", will confirm the probability that this assumption is warranted.

3. Since the field of teacher selection is a great big area up for grabs, it is desirable that research be encouraged in varieties of approaches, without too much specificity. It follows, of course, that wide dissemination of research be encouraged and that investigators be supported with the notion that hypotheses may be rejected as well as verified by experimental data. Regrettably this simple dictum, readily understood in university settings, seems to be a heretic notion in an age when innovations are publicized as successes before evaluation.

II Proposals

1. Attention must be paid to the process of stimulating attention to the methodology of teacher selection and to research, which must inevitably be an assessment of the validity of presently employed procedures and those yet to be tried or designed. Surely we can agree that fundamental research on teacher behavior - and on pupil-teacher interaction as an outcome of the teacher-stimulus must be encouraged. What is needed is understanding of why so important a field for research continues to be neglected, despite

promising starts by such workers as Withall, Mitzel and Ryans. The simple answer - too difficult - seems not enough in an age when complex problems are tackled with the resources made available by contemporary cash flow.

I suggest therefore that social psychologists and sociologists be invited to investigate broadly the field of research in teacher selection for their aid in understanding avoidance attitudes of potential research workers. There is no disposition to hide the obvious - that I have made a value judgment and that the purpose would be to be able to persuade research talent into action in this sphere.

I propose too that we evaluate the effectiveness of the design of this conference, with its influential participants, as a means of stirring interest and action in teacher selection practice and research.

2. We should take advantage of current supply and demand in the area of teacher selection. Specifically I refer to the shortage of teachers as the country begins to wake up to the great need for teachers and pumps green blood into local systems from the great big Federal artery. Teacher shortage gives the personnel research man a rare opportunity. He can lower his selection cut-off scores to provide a greater range for assessment of predictive validity. It will take some degree of courage to do this, although some reflection on the lack of predictive validity data should be encouragement enough.

At the same time, there is always an over-supply of applicants for supervisory or administrative positions in education. This should serve to be a source of comfort for those who would argue that one cannot be selective, or try to be, with teachers when we need all who apply. Furthermore, it is palatable to applicants to be fed a variety of selection techniques when there are more applicants than positions to be filled. This presents the opportunity to employ varied and multiple devices, to a socially accepting, even willing, group.

3. I now come to some specific proposals. First, I make reference to the 16 "Suggestions for Further Research" on pages 55-57 of "Teacher Selection Policies and Procedures in Large Public School Systems in the United States." There should be enough ideas here to generate several bushels of Ph.D.'s or Ed.D.'s.

I should like to take the time to express myself on the perennial dissuader - the lack of sound criteria. The fact is that sound criteria exist only in relatively simple occupations and not in complex professions. Worker output, in terms of quantity, or quality, or time, or a combination thereof, can be employed as criteria for production line employees. But where do you go when everybody knows how hard it is to define "success in teaching" particularly since this amorphous generalization (bad to begin with) keeps shifting in different school settings, at different levels and with different subjects?

At least we have learned from previous study that the overall, general estimate of "success in teaching" is a concept to be discarded. We can work with dimensions of teacher performance, as the local hiring school system defines them. These dimensions may be with respect to teacher behavior, such as "evocative of pupil participation," "encouraging pupil-pupil interaction," "accepting of deviant behavior," etc. They may be with respect to the ultimate in expectancy, namely pupil development, in skills, knowledge, or attitudes.

Let's not beat a dead horse. We can all agree that research is necessary to refine and define the dimensions and to determine methods objectively - or reasonably objectively - to assess them. I propose that we accept crude estimates of the extremes in dimensions and not wait for the millennium. I propose that we engage task forces of teachers, teacher educators, school administrators and personnel experts to agree on working definitions of dimensions of teacher behavior on a scale from "most desirable" to "least desirable." Then obtain nominations for extremes on these scales - the "best" and the "worse." Various procedures can be employed for these nominations. They could be peer nominative techniques, observer ratings, supervisor ratings, pupil nominations and measured pupil performance. Hopefully a variety of techniques would be employed.

I am arguing in short, for our getting started with best available techniques to obtain criteria while others among us continue more basic research.

In another setting (APA Annual Meeting, September 1966) I have also urged that we utilize the best informed personnel minds to review present selection procedures. While I would hardly classify such activity as research, I do maintain that some improvement in present procedures can ensue, without waiting for results of years of study.

In short, I am urging a redirection of energy to the problem of teacher selection research and procedure, in a reasonable and practical way without sacrificing the ongoing need for basic research.

Finally I would like to propose the need to establish a clearinghouse for research and practice in teacher selection. I don't know who would establish this. I believe the field is important enough that some university interested in developing this branch of educational administration might be encouraged to assume such leadership. Certainly a repository of findings with dissemination facilities would be a major resource in development of interest in the field.

SECTION III. CONFERENCE PROCEEDINGS

Greetings

Paul Denn

Board of Examiners

Good evening, ladies and gentlemen. Everything that we say from now on will be taped. We do have to telescope this evening a good deal of what we have to say and therefore some of the humorous remarks which I attempted to gather together at the very last moment will have to be omitted. In connection with this taping, please speak clearly and distinctly. If you ask a question, would you state your name so that it may be recorded.

We are all seriously engaged in what many of us - I think all of us perhaps - think is just about the most important thing in education, the selection of good teachers for children of our schools. Whatever we can contribute at this conference towards the improvement of such selection will put us all that much ahead and the nation that much more in debt to all of us.

I'd like to express the thanks of our board to the people who worked so hard on this conference: our chairman, Dr. Bogen, who I'm now informed is in the hospital and will undergo an operation tomorrow; Dr. Gilbert, who worked very closely with him on the research committee; Dr. Lang and Dr. Kalick, both of whom were for a brief time our entire research staff. This evening I'm going to call first on Dr. Gilbert to outline for you the background and objectives of the conference.

Background and Objectives of Conference

Harry B. Gilbert

Pennsylvania State University

Thank you, Paul. I am here to outline the background of this conference and I shall be brief. I think it has to start with the role of the Board of Examiners in teacher selection. It's just a plain fact of the size of New York that New York City's Board of Examiners is the largest teacher selection agency in the country. It is involved more with selecting teachers than any other agency. Over 50,000 applicants a year, a school system that has 55,000 professional personnel at last count and still rising, a budget for selection that's well over a million and a half, all of these facts give evidence of the large scale involvement in teacher selection. For years the Board of Examiners has been interested in improving its selection techniques, but the Board of Education has not seen fit to support research in teacher selection. The Board of Examiners employs one research associate and has not even been able to obtain funds for a secretary for him. This seems incredible and as I sit in my own little lair on Mt. Nittany now I find it hard to believe, but year after year after year, the Board of Education has simply refused to recognize that you can't spend all this money on selection without evaluating the process. At the same time we've grown tired of hearing criticisms by informed people that we ought to be doing some research on our selection techniques. The less informed people simply say "Abolish the Board" without even thinking, without even realizing the implications. But these important facts of our background, the desire to evaluate the process of teacher selection and the failure to get the support that's necessary has caused the Board of Examiners to look elsewhere for support in this very vital process. And in the looking elsewhere it has recognized that there is a high degree of interest in the process. The interest is latent and this is something we'll talk about later in the meeting, but all of this background is necessary to understand why the Board of Examiners has come up with a 5-step procedure to generate more interest in the process of teacher selection. I want to outline the five steps and then delineate the objectives of this conference.

1. The first is a survey of procedures. The Board of Examiners undertook with aid of the US Office of Education to find out what large school systems throughout the country say they are doing in teacher selection.

2. Second, is this present phase - an invitational conference in which a group of experts representing industry, universities, school systems, state education departments, civil service and teacher organizations, people who know the process of selection and can apply it to school systems, have been invited to come here to discuss the implications of the survey and to make recommendations for action.

3. Third, we intend to disseminate widely the results and recommendations of this conference.

4. Four is the action step where we hope evaluation of procedures, development of new procedures and research in the basic problems confronting those interested in teacher selection will take place in a variety of settings.

5. And fifth, the establishment of a clearinghouse somewhere where all the results of research and the variety of forms and procedures utilized in teacher selection will be collected and then further disseminated.

I now conclude with a simple and straightforward delineation of the objectives of this conference. There are three objectives as I see them. In the first place we have just completed a survey of large school systems, the largest and some that are reasonably large. What does this mean in terms of selection? There are some obvious implications of the survey that personnel people with experience and know-how can make with respect to ongoing procedures. More important though, what kind of research do we need to do? Secondly, having looked at the implications of these surveys, let's put them in very specific terms with respect to teacher selection practices. This is not to say that we forty people here can recommend action which we know will be followed. We do think, however, we should set forth what should be done in terms of needed research in teacher selection, and any related matters that may come up. You just can't lay out ideas to a creative bunch like this expecting that it will follow a pattern. And this in turn should result in a summarizing document which can then serve as a guide for research and practice throughout the country. We think - and I'm quite frank and bold about what I'm about to say - we think that the prestige and the brain power nestled right here which might result in a document which says this is a set of useful guides for people who are interested in teacher selection might then serve as an important stimulant for the country. We hope it moves in directions that can't be predicted right now. But above all, we hope it moves because right now the whole field of teacher research and teacher selection is unfortunately stagnant and very vitally important. Thank you.

Paul Denn: I'd like now to introduce Miss Gertrude Unser, who was chairman of our Board last year and who will lead tonight's panel discussion.

Session No. 1: Teacher Selection Methods in the United States

Chairman: Gertrude E. Unser, Board of Examiners

Teacher Selection Methods in Large Public School Systems in the U.S.: Gerhard Lang, Montclair State College

Teacher Selection Methods in 62 School Systems Affiliated with the Metropolitan School Study Council: Perry M. Kalick, Hunter College of the City University of New York

Gertrude Unser: You know, I'm an old school teacher and I think one never really overcomes the habits of a lifetime. Every school teacher assumes that the class has done the homework but, just in case, she then tells them what they should have learned. I'm assuming that you have read the two publications, one called "Teacher Selection Policies and Procedures in Large Public School Systems" and the other called "Teacher Selection Policies and Procedures in School Systems Affiliated with the Metropolitan School Study Council." The first was the major piece of research undertaken and dealt with public school systems of a certain size, those having 12,000 or more pupils. The other was a parallel piece of research related to and growing out of the first, but dealing with smaller school systems that were relatively more favored economically. I think that each of us brings to the reading or the study of this kind of document a certain predisposition, but if you have read them carefully, I believe that certain conclusions are quite inescapable. Despite the fact that there has been considerable experimentation in the curriculum, methodology, and organization of schools in recent years, we're struck in reading these documents (and we know from our own experience too) by the fact that in the procedures used to select teachers we're still operating in a sort of horse-and-buggy age. The conclusion is inescapable that many of the techniques used are really dictated more by expediency, that is, the availability of applicants at a particular time or considerations of cost in time and money, rather than reasoned and knowledgeable considerations of what are the best selection procedures. I think, too, that we all know that there is a dearth of research in the validation of selection procedures against other criteria. I am particularly interested, and I think other members of my Board are, in understanding the effect of the pressures in a period of teacher shortage upon selection procedures. There are many more things that strike one as one reads these documents. I don't want to go into them now because I assume that you have read them and I assume also that the following speakers will talk about them, but just to refresh your memory concerning the procedures and conclusions of these studies, we are going to call upon Dr. Lang, who was a research associate with the Board of Examiners when this study was being made, to discuss very briefly the teacher selection procedures in large public school systems. Dr. Lang is now an Associate Professor of Education at Montclair State College. We'll then call upon Dr. Kalick to discuss the parallel study, the selection procedures used in smaller school systems that are more favored economically. There are certain striking resemblances and certain differences. Their presentations will be brief and then I think they will be happy to answer any questions which you may have. Now we'll ask Dr. Lang first to discuss the major study, the procedures used in large public school systems.

Gerhard Lang: I see that Miss Unser operates under the same illusion that we do in the colleges, namely, that people do their homework. We hope, however, that most of you have had a chance to browse through the report on our study of large public school systems in the United States[1] or have at least digested the summary of this study. My purpose here is not to recapitulate the mass of statistics, but rather to refresh your memory, to point out a few salient features, and to answer your questions regarding the various aspects of this study, which is the point of departure for our conference.

We conducted a survey of 320 large public school systems, defined as those systems which have at least 12,000 pupils, with respect to 15 areas of teacher selection policies and procedures, namely:

1. Analysis of existing staff resources
2. Preparation and use of job descriptions
3. Resources used in the recruitment of applicants
4. Means of giving prospective candidates information regarding the school system to which they are applying
5. Non-local selection of teachers
6. Use of the application form
7. Professional preparation required for teaching positions
8. Use and follow-up references
9. Use of examinations (written, oral, physical, etc.)
10. Interview techniques in teacher selection
11. Classroom observation of candidates

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[1] Harry B. Gilbert, Isidore Bogen, Gerhard Lang, and Perry M. Kalick. Teacher Selection Policies and Procedures in Large Public School Systems in the United States. Unpublished report, Cooperative Research Project No. S-334, Office of Education, U.S. Department of Health, Education, and Welfare. 1966. 63 p.

12. Use of eligibility lists
13. Timing of notification of appointment
14. Declination of offer of appointment
15. Appeals from the decision of the selecting authority.

What were some of the major findings? We found that only about 25 per cent of the respondents prepare job descriptions for teaching vacancies and only 5 per cent use a specific job description form. Less than 13 per cent of the school systems give examinations as part of their selection process. Physical examinations are required by about 60 per cent of the school systems, or conversely, 40 per cent do not require a physical examination, indeed a most surprising finding. All large school systems interview candidates. About 30 per cent of the systems almost never or only occasionally train their interviewers. While the time allotted to the interview ranges from 10 minutes to over one hour, the majority of school systems (55 per cent) devote between 20 to 30 minutes to their interview. In this short time interval, interviewers are expected to assess up to 13 characteristics of the candidates, e.g., "ability in the subject matter that the candidate proposes to teach," "logical thinking," "attitudes towards his work," "potentiality for professional growth," "personal appearance," and "philosophy of education." One may well question the validity as well as the reliability of the interview conducted by the typical large public school system. References are almost universally requested from former employers and college professors. Surprisingly, however, 25 per cent of the school systems ask for testimonials from friends of the candidate, a rather questionable procedure. What about sampling the candidate's teaching ability? About 60 per cent of the school systems do not observe candidates, only 20 per cent of the systems tend to make one observation, and 6 per cent apparently make two observations. Despite our chronic concern about attracting people to enter a teaching career and our considerable investment in the selection process, large school systems tend to notify candidates rather late of their appointment. May seems to be the modal month of notification. Moreover, the larger the school system, the greater the tendency to notify candidates later. One can only conjecture as to how many candidates are lost because of the lateness of their notification.

These and the many other findings of our study are subject, of course, to a number of limitations. We have relied on a detailed questionnaire as our data-gathering instrument and have assumed that the respondents gave us honest and correct information. We must also bear in mind that the conclusions drawn from the data are pertinent only to the population of 320 large public school systems which had returned useable questionnaires. The findings cannot be generalized to populations of other school systems.

Nonetheless, the analysis of our data left us with a strong impression, reinforced by our visits to representative industrial concerns, such as American Telephone and Telegraph, Standard Oil of New Jersey, Metropolitan Life Insurance, Macy's, New Jersey Bell Telephone, and the Port Authority of New York. The impression is that, compared to generally accepted practices used in industry to select personnel who are at a professional level similar to that of teachers, teacher selection practices in large public school systems appear to be by and large inadequate and unsophisticated. It seems that more and better efforts are expended to select first or second level supervisors than teachers for our large public school systems.

Realizing that there exist many gaps in our knowledge of what constitutes "effective teacher selection practices," we have concluded our report with a series of 16 suggestions for further research. Our survey represents only a beginning. We are optimistic that this conference and its brain-storming sessions will bring us closer to our goal - to select qualified teachers, so vitally necessary in this critical period of American society. Thank you.

Perry Kalick: The questionnaire that Dr. Lang referred to was also used in a study of a group of school systems in the metropolitan area. These systems are the Metropolitan School Study Council Systems (MSSC). They're clustered around New York City and they've engaged Teachers College, Columbia University, to do research for them. Two of the school systems were in Connecticut, 22 in New Jersey, and 38 in New York. What are the characteristics of these school systems? On an average they spend about two-thirds more per pupil than the large public school systems (LPSS). Their median size is approximately 150 teachers and they have about 51 teachers per thousand pupils as opposed to 38 teachers per thousand pupils for the LPSS.

What are the main findings of this study, which compared teacher selection practices in the MSSC systems with those in the LPSS? As is the case with the LPSS, the MSSC systems use the interview as the prime selection device. The MSSC systems make a greater effort than the LPSS in extending the radius of search for candidates; they make twice as great an effort as the LPSS in the search for candidates beyond a 500 mile radius and somewhat more than twice the effort beyond a 1000 mile radius. MSSC systems exert proportionately three and one-half times the effort to make at least one classroom observation of a candidate. Ninety-two per cent of the MSSC systems telephone the recommender of a candidate as contrasted with 66 per cent of the LPSS. The MSSC systems attempt to improve the reliability of their interviews by the primary use of a committee of interviewers. There has been enough research to indicate that a decision based on a consensus of the committee is more effective than one individual making the decision. As compared with the LPSS, proportionately almost twice as many MSSC systems will employ the committee approach in the selection of candidates. When the MSSC systems do employ a committee, they will involve the principal four times as frequently and the superintendent of schools five times as readily as the LPSS. Of course, this is a function of smallness of size. Forty-five per cent of the MSSC systems as opposed to 23 per cent of the LPSS will notify candidates of their selection by the end of April.

It's not all one-sided, however. The smaller school systems are less likely to have interviewers who are trained in the conduct of the interviews. Some 45 per cent of them train interviewers as contrasted with 64 per cent of the large school systems. As opposed to the LPSS, check lists, aid to interview blanks are very much the exception rather than the rule, in the MSSC systems. The MSSC systems make roughly one-sixth the use that LPSS make of data processing systems in the selection process. What are the implications here? Very likely, the advantages inherent in smallness of size coupled with the comparatively high expenditure level per pupil are the factors which account for the superiority of MSSC school systems over the large public school systems with respect to the selection practices that I have cited. A small system with a high expenditure level per pupil might be in a better position to provide a greater proportion of administrative time to the selection process. Even in the LPSS study it was found that there are certain advantages of the smaller of the large systems. Certain advantages accrue to smallness in size. Here, real smallness in size coupled with a very high expenditure level per pupil increased the chances for effective teacher selection. We came up with a number of recommendations and suggestions for further research. There is a panel on Friday morning to consider further research. However, at this point I just would like to point out a few that would appear to be pertinent to what has been discussed. First, is there a greater clustering of more desirable practices in those school systems which rank high on a criterion of quality? Also, at which point in school system size does it become feasible to introduce a data processing system into the selection process? And, how do selection practices of MSSC school systems compare with other systems which are clustered around other very large school systems?

Discussion

Gertrude Unser: Now if you have some questions that you'd like to address to either speaker, I think they'd be happy to try to answer them. The questions may be based not only on their brief presentation, but on your study of the documents to which they referred. They needn't necessarily be questions; perhaps you have comments that you'd like to make.

Charles Mackey: I'd be very interested in having Dr. Kalick elaborate further on the use of data processing on teacher selection device.

Perry Kalick: By the use of data processing I mean to be able to develop cards, program cards which list characteristics, qualities of the staff that you currently employ as well as the need in various vacancies as they exist throughout the system. The matching of these is made easier by having data processing particularly in an exceedingly large system like Chicago or New York City. The data processing also allows for articulation; with job descriptions, needs can be tied in with characteristics that have been established for each candidate or teacher.

Charles Mackey: Has this been used successfully so far? The reason I ask that is not to be facetious, but that the frequency of divorce among sponsors who have been matched according to data processing reveals a higher rate of divorce than in any other type of matching. I was wondering if this would apply to teacher selection as well.

Perry Kalick: I'd like to think that the emotional factors here are not involved, although the emotional factors in working in a specific type of classroom are very much involved. And this is most important - that we identify the characteristics of the vacancy with the characteristics of the teacher if we know the characteristics of the teacher.

Charles Mackey: Is this process being used now? Data processing in teacher selection?

Perry Kalick: Yes, in only 5 per cent of the MSSC school systems and some 29 per cent of the large public school systems.

Charles Cogen: I guess this is a question that applies to this entire conference not only what we have heard tonight. And perhaps I shouldn't ask it, but maybe the answer is obvious in the light of what Harry Gilbert said in the beginning. Has there been any attempt at all anywhere to make any study of the outcomes of the examination system - that is, the product, any correlation between the competency of the teachers as shown on the job and any of the processes used in the examination system? Do you have any such information?

Perry Kalick: Charles, I think if we had the answer to that we wouldn't be here. The fact is that there are very few studies of the predictive validity of any selection devices in the teaching field. It's our hope that we will stimulate this and we are going to develop this point at much greater length in the next day or two so I don't want to belabor it. Let me just point out that we've made a few little passes at this and we have some tentative findings - it's not our purpose to go into those now - that lead us to suspect that we have some promising paths to pursue; but some of the basic research on it, even reliably assessing what happens in the classroom, are still to be done. They have been opened up and started.

Harry Rivlin: I'm wondering whether there isn't a basic fallacy underlying the studies and the procedures of this and every other teacher selection agency. There is a sort of implication that one knows what a good teacher is, and if one knows what a good teacher is, then one can test to see whether a person is or isn't a good teacher. Various attempts to define what a good teacher is have failed - some more expensively, some less expensively. Instead of selecting good teachers, the school's job is to develop them. The selection of teachers is based better not on what happens before a person begins teaching, but after. As the various criteria were read off, the one thing that I don't think I heard was an evaluation of past performance. There is another kind of agency that selects teachers, our universities. When our universities select their faculty, the one thing that they do most intensively, if it's an institution that cares at all about selection, is to make a thorough study of the past performance of the candidate. They don't check his eligibility because there are a great number of courses being taught in college which weren't available when the members of the faculty got their doctorates. It isn't, "Has he had the courses in this area?" but, "Can he learn them?" Most of the university's best effort goes into the evaluation of past performance. In the case of beginners in college teaching, they can't evaluate past performance, but the universities will evaluate, and evaluate rather rigorously the performance before a person is granted tenure. In short, you have the conflict between the need to be legal, the need to be impartial, and the need to be intelligent about how you find the best person for the job. When the need for new teachers is great, you're not really selecting, you're rejecting those who are obviously unsatisfactory for one thing or another. Does it make much sense to spend so much effort in determining whether this fellow gets an 82 or an 81 - it's really a pass or fail. In short, I wonder whether the emphasis cannot be put first on judging a person's potential by what he demonstrates, making the major part of the examination not the pre-service part but the post-service part or the in-service part, and in the case of people with experience, developing ways of evaluating what they have done rather than trying to disregard all that, or at least placing very little emphasis on it.

Perry Kalick: I wanted to make a short comment - I think

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this is why we're here. We're going to study the implications of this. As Dean Rivlin says, if we don't know what characteristics of a good teacher are, how can we select? I think if we want to shift that entire fallacy to the whole business of teacher preparation we might say let's not do any teacher preparation either, because we don't know what a good teacher is. I think this is what we're going to develop in the next few days.

Jay Greene: On Dr. Rivlin's contribution, the plain fact is that selection is taking place - selection of teachers and selection of civil service workers and selection of people for jobs in industry. It's being done because there are, in some situations, more people who want jobs than there are jobs. Now the question then arises if you are going to have to select - if you have 3 people applying for one job, whether it's for teacher or principal or chairman, then what is the best way of selection? Dr. Rivlin's assumption of throwing all the weight on the preparation and the post-appointment feature would be wonderful if you didn't have more people applying than you needed. Furthermore, it doesn't consider another practicality - that if you appoint somebody to a school in order to observe him in action, if you appoint the wrong person, the damage that may be done by this individual in a learning situation for a year or two is unfair to pupils. Looking back at Mr. Cogen's comment - he asks what studies have been made of our evaluation. One of the difficulties of such a study is that if you are going to compare what you believe to be a valid selection procedure with an invalid selection procedure, it means that you have to put the invalidly selected people into jobs so that you can then compare them to the people that you had validly selected. In basic research in public administration this is morally wrong. How can you in conscience say, "These people we believe will make good principals. We will appoint them. These people we don't believe will make good principals but we'll appoint them for a study's sake in order to compare the good to the bad." This has been one of the great difficulties of this sort of research, although there are some others. I'm delighted that we're focusing on some basic questions that we seldom get to discuss.

Gertrude Unser: I'd like to comment on one aspect of what Dr. Rivlin said. As I understand it, he was asking among other things, why there was not a greater emphasis upon an evaluation of past performance. The vast majority of the people who are selected for teaching positions have no past performance, unless we consider their college preparation as their past performance. Now I see two problems associated with selecting teachers on the basis of college records. First, we have some 1200 teacher preparation institutions. Those of us who have dealt with marks and recommendations have learned how unreliable these ratings and recommendations are, what great variations there are. Standards differ widely. Second, although we confess that we have no proved means of validating selection procedures against performance on the job, I think we have even less in the way of establishing the relationship between success in college preparation and success on the job. These two are quite different things.

David Darland: I hope that we don't lose track of what Dr. Rivlin raised, because I think he raises this as a process that begins in the teacher education program, if I heard it and reaches beyond what we now consider to be the termination of the teacher education program. Is that what you're saying? The selection process?

Harry Rivlin: I'm sorry. I must not have said what I meant to say. I wasn't thinking of the teacher preparation as the basis for selection, but I'm saying you have in a sense two different groups. You have an experienced group and an inexperienced group. The experienced group consists of teachers who are coming up for administrative positions, or people who've been teachers or administrators in other cities. How can you evaluate past performance where there is no past performance? Where there is no past performance, as in the case of a new teacher or a new principal, I wouldn't rate him on the basis of his record in college. What I'm saying is that when you appoint him, remember that you're appointing someone without a past record and you must evaluate the "past" that he is creating in his classroom. I suggest that you select your new people as well as you can, but remember that you are selecting only risks, and that the important part of the evaluation comes at the end of the initial appointment.

Jules Kolodny: I would direct my attention to several of the comments made here. First to Dr. Greene's comment that society doesn't want to set up a research technique by putting incompetent people into the field. We have school systems, (as we've been told), that have different kinds of selection procedures. It seems to me that we ought to determine whether or not the products (mainly the students who have been turned out by this institution called public education) are better, the same, or worse, depending upon the selection procedures. To my knowledge, the colleges have made no such indication that those school systems that use a particular kind of selection procedure tend to give them better students than those that use a different kind of selection procedure. I haven't heard this come from industry, either. We must remember that while we don't have the intangibles and the emotional factors and possibly some of the citizenship factors involved in education, the fact is that in terms of the things that make youngsters employable, that make them eligible for academic training, I would assert in no wise depends on whether you use one procedure or another. In other words, there are good schools that use procedure A and there may be good school systems that use procedure B. It seems to me that we are trying to determine whether the procedures are sound in vacuo. If the procedures are sound, they'll turn out good products. If the procedures are unsound, they won't turn out good products. We have to follow the conveyor belt of what happens to the students who have been selected by procedure A, by procedure B, etc. I would assume that they get lost in the general review of our culture and society and the employment world, the industrial world, the commercial world and the collegiate world. Consequently, it may well be (if I remember my undergraduate days and Mills Canons of Induction) that these particular factors that we're focusing on are really irrelevant to what we're concerned about.

What we are more concerned with is what goes on in the classroom. Therefore, this relates to what Dr. Rivlin has been talking about. In other words, maybe we're setting up a straw man and we feel that we have to have certain kinds of procedures because traditionally we've used them. I do concede that the kind of selection procedures that are not exclusively based upon subjective factors will tend to eliminate discriminatory factors, in terms of race, religion, general attitudes and appearance, possibly. A system that relies exclusively on interviews may not have as many long-haired teachers as the system that relies upon an effective written examination; but, I'm not so certain that this is the thing we ought to direct our attention to. Frankly, I'm not impressed by any of the research and I would not want to appropriate large funds for such research if I were a member of a Board of Education. I would look at one thing primarily as you follow the products of your school system which uses a particular kind of institution for selection: Are your products better, worse, or the same as compared to the products of other school systems that use different kinds of selection procedures for their staffs?

Gertrude Unser: I'm addicted to responding to each speaker. But I think you say very truly that the ultimate, the end product of of all this, is the student and what happens to him. But certainly the quality of the teacher is only one of the many factors which forms the student. We are trying to find out what makes a good teacher and how a good teacher makes a successful student but to say that this is the only factor is oversimplifying it enormously. There are so many other factors which enter into a student's success. We have reached the end of the time originally allotted although I must say we did start rather late. Is there anyone else who has a question or comment?

Bernard Berger: I wanted to avoid the questioning of the research done except that all I want to say is that I think what has been done is valuable and I think we should know preliminary to any further research the characteristics of school selection systems as presented in the two studies; but I was a little unhappy, and this relates to what Mr. Kolodny said, that there wasn't some attempt at the same time to find out something about community satisfaction with the selection systems used. For example, where you had a so-called primitive system did the results, the teachers obtained in this way, did they perform satisfactorily, was the community satisfied, because up to this point of the research you know nothing but a series of facts, that there are various kinds of selection procedures used in various size systems.

Harry Gilbert: All we did was to ask school systems what they say they do in terms of selection of teachers. If we would do it over again today we could do that little survey a lot better but all we did was say, "What do you folks do?" Now I'm sure we can get all kinds of leads for how that could be followed up including this vital one, but at this very moment I have to remind all of us that all we want to do tonight is orient ourselves to the objectives of this conference and mainly recite to you, review for you, what we started to do. Let's save all this because I think every one of these questions will come up in the course of the program laid out for the next day and a half.

Paul Denn: Thank you, ladies and gentlemen. This meeting is adjourned.

Session No. 2: Personnel Selection Practices in Industry

-procedures currently utilized
-validity of selection procedures
-relevancy of industrial selection practices to selection of teachers

Chairman: Jay E. Greene, Board of Examiners

Paul Baker, Standard Oil Company of New Jersey
Douglas W. Bray, American Telephone and Telegraph Company

Paul Denn: Good morning. Yesterday we did a little brainstorming and we did review some of the basic questions in connection with the selection of personnel; some of us asked, "Should we select?" Others, "Can we select?" Some others said, "Who should select?" And, finally, "How should we select?" We brought together representatives of industry, who select personnel for their purposes; civil service, and so on today. And this morning we'd like to hear about procedures that have been feasible or successful in both business and in civil service to see to what extent they can be helpful to us in the selection of school personnel. To begin with, then, this morning, I'd like to introduce my colleague, Dr. Greene, who will, in turn, introduce his panel.

Jay Greene: At one time, it was thought that the problems of selection in industry were remote from problems of selection of professional personnel in schools, and while this might have been true years ago, more and more the problems, as I reviewed them, seemed to be close together: close in their complexity. We often oversimplified their problems, I think, but their problems of staff selection are complex. I'd like to introduce our first speaker, Dr. Baker, who has a strange title for Standard Oil of New Jersey, Advisor on the Social Sciences for Standard Oil of New Jersey. I had to read that a few times because furthest from my mind was the involvement of Standard Oil of New Jersey in the social sciences. In this capacity, he does consult with managers of affiliated companies around the world on problems of selection, placement, evaluation, management development, sensitivity training and all the other good things that a good psychologist is interested in. Dr. Baker.

Paul Baker: Thank you very much, Jay. I will try to follow the pattern set last evening in the beginning session by keeping my remarks rather brief, hopefully to the point and hopefully to open myself up for lots of pointed questions in an inquiry period to follow. As Jay indicated, I think that we will find in the course of these discussions that the problems of selection in industry are not materially different from the problems of selection any place else. I'm fairly confident that Standard Oil's selection procedures are not, in any real significant way, different from any other industry's selection procedures. We all do pretty much the same thing. I choose to believe, however, that Standard Oil does a much, much better job than any other company in its selection.

The kinds of things we do are the kinds of things that you do in your teacher selection. We analyze our needs, try to anticipate the numbers and kinds of people that we're going to need. We do it in terms of the immediate future and in terms of the long-range future. We try to keep in mind at all times what our needs are going to be twenty years from now, as we consider our selection problems. Quite literally, this is true. We are thinking about the changing that's going on in our industry and the kinds of people that we're going to have to select today in order to have the right mix of talents and skills to man the industry, as it will be twenty years from now, which is going to be considerably different in many important and fundamental ways. Having anticipated our needs, we go through all of the traditional steps of recruitment; we advertise in the journals, we scurry about the campuses, colleges and universities, trying to interest the young professional people in coming to work for us. We even in some critical areas rather aggressively recruit in the high schools for secretarial help. This is particularly true in New York City, for example, where the clerical situation is tight at the present time. Having interested some young candidate in applying for work in our company, we in most all cases, and there are exceptions to this, administer a selection battery, tests, quesionnaires, and again in most all cases these are fairly elaborate test batteries. They are well-researched with proven validity and in the testing programs both in the United States and overseas.

I think this is the one place where we have concentrated and have been able to do real sound research, the kind of research that would stand up as academic research, or thesis research, and in all cases, we find that we are able to develop selection tools or selection tests which do a very, very good job for us. And our testing programs, the tests that we have developed to the tests that we use, a catalogue of them is a fairly thick book. Admittedly, many of them, it's the same test in all different languages of the world, but still they are different tests.

We usually aim for a validity coefficient of at least .60 and seldom fail; mostly our validities are around .70. I think that if we were to distribute all of our validity coefficients, the modal value would probably be around .65, but we have many that run into the high .70's which is good.

We, of course, depend, as you do, rather extensively on the interview. We have done a bit of research on the interview process and we find that when we can get interview data cast into quantitative form that it too can contribute to our overall validity. But this also depends upon the amount and quality of training that is given to the interviewers and in many cases, in many of our installations, we have trained essentially the whole of the management staff in selection interviewing techniques and in cases like this and in these cases where we can get good data from interviewers, we find that although the collective validity of the interview information by itself is rather modest, perhaps in the .30's, this can add a significant amount to a statistical prediction, if you will.

More importantly, and I think at a point there are many differences in the selection procedures we follow, deriving from the differences in the nature of the problems that we face, differences between industry and education, but one of the things that I think is a crucial difference is the fact that we consider the selection process not merely in the sense of selecting an individual once; admittedly, this is the crucial selection, that is the new employee who goes to work for our company, but there is a continuing process of selection from there on, and in many, many steps that one takes, one is faced with another selection procedure. That is, a craftsman, for example, is initially selected to enter training to become a craftsman in some future years and it may be a very brief period of time, four or five years, up to ten or twelve years, that this individual will again be faced with the selection procedure for foremanship training. And again, at this point in his career, he is submitted to exactly the same steps of being advised or recruited, if you will, of the opportunities, being interviewed, being tested, being examined rather thoroughly, and his work record then also becomes part of the selection procedure, and this can continue on up into still higher ranks of management.

The same thing is true to a lesser degree of clerical help; it is very true in terms of our selection of young professional people; as they are being considered for management positions, they get probably the most exhaustive testing program of any in our company in our management testing program.

We are particularly concerned with the problem of selecting managers and it's the one selection process upon which we have concentrated in the last ten years, just now doing ten-year follow-up study on predictions that we made ten years ago about managers. We have done other follow-up studies, but not based upon this particular selection package and in our follow-up studies, we demonstrated that we do have long-range predictive validity; again, in the order of magnitude of something over .60, and we have extended this particular management selection program; we are in the process of extending it around the world, again in all languages. We've completed the study in Spanish in Latin America; we have in progress studies in Denmark, Finland, Norway, Sweden, Holland, and the Scandinavian area.

We have exhausted the study in Canada and in the United States, and have again found that as a selection procedure, this has a high degree of validity.

I've mentioned the successive steps of continuing selection as one of the major differences between business and industry. I think there are probably other differences between business and industry that would give rise to some differences in perhaps our emphases; that is, the broader opportunity that we have for placement; in other words, I think that we are able to achieve a greater degree of predictive validity in a statistical sense because we can accommodate a much broader means of talent in our selection and when you are faced with the problem only of selecting a classroom teacher who is going to be a classroom teacher, as a career, rather than as a person who is coming in with the idea that we are trying to select a good person for development and when we fail, in a sense, of finding a person who is going to move up a particular line, we have lots of other lines in which we can put this individual. I don't think you have quite that opportunity in educational institutions, so perhaps the glittering success that we had in our statistical studies of prediction are a function of these differences.

Well, with that kind of comment, perhaps I would like to start the question period by throwing questions out to you because I come here to learn as much as to try to inform, and directing these questions to the people who are most concerned with teacher selection; and these are the kinds of questions that we examine in our processes of consulting with managements. But there are the simple logical questions, like those of you who select teachers, do you ever make mistakes, do you ever hire people who turn out to be failures, and, if so, how do you know? Another basic question, the people who are responsible for hiring teachers, what difference does it make if you make a mistake? In other words, in business, when we pin down the accountability for mistakes and we can make it stick, and we make it worth the individual's while to do a good job of selecting people and he knows it, but does the same thing obtain in the education industry? But I would submit that if the answer to the first question is yes, we know we make mistakes, and you can see these mistakes, then the opportunity most surely exists for you to do the same kinds of research that we have done in terms of determining what are the characteristics of this good teacher, why did we make this mistake and what we may do to avoid it in the future.

Jay Greene: Thank you very much, Paul. We had agreed that both speakers would make their presentations before the question period. I was interested, as I am sure you were in hearing Paul's comments on the difficulties of predictive validity and the problems concerning making mistakes, and that brought to mind this brief anecdote of a very young assistant professor who was teaching American

History in a university and he had in his class a wrinkled and gnarled old Chinese student who was there for a degree, who had a philosophical bent of mind. This young history professor asked the class to name three good results of the American Revolution of 1776, and he called this elderly Chinese. The elderly Chinese got up and said, "It's too soon to tell."

This is one of the problems of the predictive validity. You select a teacher and it would seem, on the face of it, easy to say, "He's a good teacher, a bad teacher, depending upon the product, i.e., measuring the students to see how well they do. If he's a good teacher, the students will do well." Then the anecdote comes to mind and you begin to ask yourself in what ways will you appraise the students. Their factual knowledge? Their changes of attitude? How do you measure this? Is it the immediate effect, or what will happen to them in ten or fifteen years, or in a lifetime? All of this is complex, and troubles all of us who are here, including key people in selection in industry. That leads me to Dr. Bray, who is the Director of Personnel Research for American Telephone and Telegraph Company, a grand national institution, and who prepared for his position at quite a number of select universities. Doug Bray, you have the floor.

Douglas Bray: When I prepared my talk for this Conference, I planned to present an overview of the various devices used to select business managers, and their relative degrees of success, with the thought that you might see usefulness in some of them for the problem of teacher selection. As I listened to your discussion last evening, however, I was impressed that even in that short session you had raised most of the crucial selection issues. It seemed to me, therefore, that I could make more of a contribution by addressing myself to what I consider to be your central problem and focusing on one management evaluation technique which may offer a solution to that problem.

I recently had the pleasure of attending an excellent symposium organized by Dr. Gilbert and Dr. Lang at the American Psychological Association meetings, a symposium also on the subject of teacher selection. One of the panelists, Dr. Elizabeth Hagen of Teachers College, read some quotations about the difficulties in the selections of teachers and the great need for research. These quotations sounded very much like the remarks made in this room last evening and yet they were thirty to forty years old! My prediction is that unless you face up to your central research problem, you can have meetings like this one for another twenty years without getting much further ahead.

Your central research problem is, of course, what psychologists call the "criterion problem." Unless you can somehow agree on methods for determining whether a person is a good teacher, an average teacher, or a poor teacher, you might as well forego the rest of your discussions. In getting into this problem, I am probably going to impinge on the papers of some of the panelists scheduled further along in this Conference, such as those who are going to speak about problems of validity and the design of needed research. I hope you will forgive me if I go ahead anyhow.

The management evaluation technique which I am going to describe can serve as a selection method. This is in fact the way in which we use it. It seems to me, however, that there might be practical difficulties in using the method in the selection of teachers which would be very hard to surmount. I'll touch on these later. More important is the probability that the method might yield a criterion, and if you could agree to accept this criterion the way would be open for research on the validity of the kinds of predictors used in the selection decision, such as interviews, biographical data, college grades, ratings in practice teaching, etc.

We in business were faced with the same type of criterion problems as you are. Various appraisal plans have come and gone over the years, and yet few are ever satisfied that we can rate excellence as a manager with high reliability. There is much evidence that ordinary supervisory ratings contain substantial error. It is likely that many promising selection devices have been discarded because they were "validated" against poor criteria of success.

We believe that we have found at least a partial way out of this dilemma in the technique we call the "assessment center." We developed this method by first asking higher management to agree on a number of characteristics which would usually distinguish between good and poor managers. After much discussion and definition and redefinition we wound up with a list of 25 qualities. Among them were such things as oral communication skill, decisiveness, leadership ability, independence, etc. You could probably continue the list yourselves and come pretty close to what we have.

After these qualities were agreed upon, we devised techniques which would elicit behavior relevant to these characteristics. These techniques included interviews and paper and pencil tests, but more important are the "simulations." Usually there are three of these. One is an individual administrative task, known as the In-Basket, a technique, incidentally, which has also been used in the study of school administration. The other two are group exercises--a miniature business game and a leaderless group discussion. The total assessment runs for three days, and twelve candidates at a time are assessed.

Assessment staffs are carefully trained to administer the techniques, observe behavior, and rate the 25 management characteristics. After a candidate is rated and thoroughly discussed at a staff meeting, the staff places the candidate in one of four categories: "more than acceptable," "acceptable," "less than acceptable," and "unacceptable." Staffs show a high degree of agreement in this final judgment.

Our first assessment center which actually operated in the selection of management opened in 1958. We now have over 50 centers and about 25,000 men and women have been through them. This growth has taken place not because of any high level decree but because local line management observed the process and judged the method to be, even though comparatively expensive, a highly valuable tool in the selection of better management. I might note that the assessment staffs are not professional psychologists. They are, by and large, second-level management people, most of whom have not attended college.

I would like to propose that you develop an assessment center for the evaluation of teaching ability. The qualities looked for would, of course, not be the same as ours and the assessment exercises would most likely be different, but I have no doubt that it would be quite easy to arrive at highly satisfactory methods.

Such an assessment center could, in theory, be used in the actual selection of new teachers, but there might be insurmountable practical difficulties. The great number of candidates, most of whom have to be evaluated at the same time of the year, would make staffing impossible. Assessment might, however, be done during the final year in school or during the new teacher's probationary period. I don't want to close the door completely on the use of assessment as a selection method.

My definite recommendation is, however, that the assessment center be used as a research criterion against which to validate the techniques and indices which are used, or might be used, in the actual employment situation. The profession would agree, in effect, that performance at the center would be taken as evidence of good, mediocre, or poor teaching ability, and selection research could then get going in earnest and with the hope of early and great benefit.

I know that many in this room are already inwardly protesting. You're saying that the criterion of good teaching is whether the children taught are effective and happy citizens years after they're out of school, and you think, I am sure, of any number of reasons why you wouldn't buy anything less than some ultimate criterion like that. Well, if you won't, you might as well stop having conferences on teacher selection research because you aren't going to get any productive research done. You must agree on some reliable and convincing criterion which it is practical to get. The assessment center can provide such a criterion.

Discussion

Jay Greene: Thank you very much Douglas. I have always been an admirer of the ingenuity and the originality of people in business, especially since an experience I had about a year or two ago in connection with some editorial work. They were talking about the book used in elementary school, *Look, Dick, Look*. All of you are familiar with that, and they wanted to modernize it. There was a meeting of some professional advisors, and they decided to take the book, *Look, Dick, Look*, and modernize it by spelling it backwards. And if you spell *Look, Dick, Look* backwards, you get an interesting title, *Kool, Kid, Kool*. Since that time, I've been an admirer of the ingenuity of business people. We have some time, now, for questions, and we would be delighted to refer them to our two speakers. Yes, Al.

Albert Schiff: The question I would like to ask Drs. Baker and Bray is a question relating to the selection of people at the time of initial appointment. At the present time, you were talking primarily of management people; these are people already in positions with your Company, who are working up to management positions. For example, teacher candidates are graduates of colleges and universities. When you go recruiting in colleges and universities, looking for engineers or chemists or business-ad majors, do you put them through a testing procedure? Or do you say, he's a graduate of MIT or a graduate of so and so; in other words, what do you do for people at the professional level who are not in your employ?

Douglas Bray: Yes, we do test college graduates from even the best colleges before employment although we don't attempt to put the potential recruit through an assessment center. We could not possibly staff up to assess all of our college recruits on a pre-employment basis. We are now, however, putting many candidates for sales employment through a pre-employment assessment center.

Paul Baker: I would answer the same question in terms of Standard Oil. We do not universally test young professional people. In certain functional categories they are tested prior to employment. In the total sense of all of the people hired during the year in the United States, we would be testing about half, prior to employment, with specialized testing instruments, not a massive testing battery, but more or less a screening test. We do, however, anticipate, in the not too distant future, almost complete testing of young professional people.

Milton Gold: I was particularly interested in Dr. Bray's suggestion there that use might be made of some kind of assessment in the student's undergraduate work and in the first year of teaching and I recognize some kind of relationship here to Dr. Rivlin's remark last night that the rating at the time of initial employment might rather be considered as a screening device which is followed up in the tenure period. I think that teaching has certain advantages over industry in terms of a closer relationship with the undergraduate preparation than is true in industry, and that it's possible for the New York City schools, for example, to have a very close relationship with colleges in the Metropolitan area, in terms of efforts to do some evaluation prior to graduation. And that it might be possible, then, to spread out this testing of the student and to get a broader sample than is possible than on a one-day written test plus an interview and any other kinds of performance that are required, so that maybe Dr. Bray's suggestion here of observation in the teacher education days would give a far broader sample once the criteria have been established.

Fred Williams: I wanted to ask Dr. Baker, first, the nature of the training that is given to the interviewers whom you spoke about and then ask Dr. Bray if he would also comment on the nature of the training given to the staff of the assessment centers.

Paul Baker: The nature of the training of, well, let me just give you as a case in point, I'm sure, and I do this because I'm sure you'll recognize the name Anne Roe, for example, as our principal consultant in interviewer training. She's had a lot of experience in interviewing and a lot of experience in teaching and in the field of psychology. And her development program is structured around first a study of all of the other kinds of information that one has available at the time of interview or prior to an interview, such, so that primarily you teach an interviewer not to attempt to make judgments about facts about an individual that are more readily obtained some place else, for example, intelligence. Why should an interviewer waste a lot of time trying to assess the intelligence of an individual when a twenty-minute test will do a much better, more accurate job.

But related to intelligence, a thing which one cannot so readily assess with a paper and pencil device is the degree to which one is going to use that intelligence, or how well that intelligence is applied in a practical sense. So the interviewing is, the training is one of an intellectual sort that is a study of what is appropriate in an interview, followed up by training, actual interviewing, tape recorded and fed back and an examination of the mistakes that one makes and an attempt to correct these mistakes; and it's an involved process and a fairly involving process.

At the present time, we're doing some training, using the little video recorder, which is just extending the same technique in terms of the technology available, and I think that you'll find in the future rather widespread use of the video recorder in training exercises, and particularly of this type, where you can get an immediate playback and see yourself, you know, and as well as hearing, you can see and hear the kinds of mistakes that you make in the training. Does that answer your question sufficiently or would you like to get into some of the details?

Douglas Bray: The training of the assessment staff occupies as much as three weeks; generally, we recommend three weeks, and the training amounts to, well, learning how to run the techniques, of course, but that's minimal. The important thing is to develop a common understanding of the definition, the meaning of these 25 characteristics, writing reports, so that others can see what you saw through the report, because not every observer sees every exercise, obviously, writing reports to convey to the other members in the group what happened, so that they can also make inferences about the behavior and arrive at the ratings. The last part of this three-week training is a dry-run group, a practice group for the staff to try out their wings before they meet the real candidates.

Thomas Bransford: I'm prepared to believe that Standard Oil has a very fine selection program, maybe the best in the world, but I am suspicious, or let's say curious, as to the operations that will lead to a predictive validity coefficient of .75. However, I can imagine some. I can suggest, for instance, that if I relate the proportion of admitted mistakes in hiring to the total number hired, and that I detect and admit one mistake in ten, "Yes, boys, we shouldn't have hired him." Then I compute a shortcut phi coefficient by subtracting the percentage of mistakes from the percentage of satisfactory new-hires, then I get .90 minus .10 and I come up with a synthetic coefficient of .80. However, if I follow up rejects or if I correlate some scores on selection tests with any kinds of ratings or any kind of objective criteria afterwards, and I consider that the practical ceiling on any one correlation coefficient is going to be the product of the reliabilities of the test and of the criteria, I just can't expect predictive validity coefficients much above .60, even under very favorable conditions.

Paul Baker: That's a complex question, the kind of question I used to get from my graduate students and I would send them back and say, "You reduce that to one I can answer yes or no and then I'll talk to you about it." Most of the time they'd never come back with the same question.

You're asking, essentially, how do I dare stand up in front of an audience and claim a validity coefficient of .75 and how do we do it? And I don't know how deeply to go into this. Obviously, we're concerned with the criterion problem, and Doug has discussed it in some of his earlier comments, and we have devoted probably more effort to the study of the criterion problem than we have to the selection problem or the prediction problem, prediction instruments. As you yourself point out, you must have a reliable criterion measure before you can get anything to correlate with it, but having found a reliable criterion measure in a statistical sense, say, an effectiveness in some kind of performance on a job, then it's relatively simple to pick up a handful of instruments that will scan the mental abilities and some temperament factors and get a very good coefficient.

What we do in general and in our concurrent validity studies is to approach the problem of the criterion, not directly, and this is an argument that we have, it's almost a continuing dialogue with our superiors in the organization. How do we know that you are predicting success, and what is that, really, because everybody recognizes that success in business is a complex concept; success is composed of lots of different things, and we say, well we don't really, but what we look at and what we're trying to predict and for purposes of research, let's accept the fact that we look to the intervening variables of present and past rewards for successful behavior in a rather gross organizational sense.

In a typical study, and these have been done many, many times, and for many, many years we've been doing this, we pick up variables relating to height, relative position in the organization, salary history, evaluation histories, functional histories, and so forth. For example, in one of our major studies, we had 72 bits of criterion information, things about people that reflected, in some sense, successful behavior. This matrix was factored and the first components had to be adjusted just a little bit to throw it through the age factor, so that it would be correlated zero with age and, using this as a first principal component, we look at the structure, does it make sense? If it makes a lot of sense, this then becomes a criterion number, such that you can get a score for each individual on this criterion variable and then you look at people who get big scores and everybody will agree, yes, if we could get more people like that, we'd be happy. And this becomes a criterion number which then becomes, with a high degree of a kind of statistical reliability if you will buy the concept of the length of the vector as in some way reflecting the reliability, becomes a vector variable which we can predict.

Other procedures that we've used have been the canonical variate. It's pretty much the same sense, that is you have a matrix of criterion information, a matrix of predictive information, and you, those of you not familiar with the canonical model, you essentially factor both of these matrices and then fit the two spaces together to maximize the correlation between them.

I've done a couple of studies where I've factored the criterion matrix. I've calculated the canonical variates and I've done a thing which I call iterative multiple regression, and this is striking a trial vector on one side and regressing one set of variables against that and then taking the regressed variable and regressing the other against that until the thing stabilizes. I haven't worked out all the analytics of this yet, but I know it converges not to a first component and not to a canonical variate, but to, in a sense, a more practical variate. And again, we come up with a criterion number which, people will agree, yes, that, the people in this bunch here with high scores are the kind of people we like, and they're successful people, and these others are not so successful people. This becomes the thing that we can then compare with all of our predictive variables.

Although I claim only validities in the .70's, in many cases, and these are cross-validated in all cases, in some cases right now we're doing a study where we have six basic groups which, and that's cross-validation with a vengeance, if you will, and not concurrent validity but long range, well five-year validities. I expect to get, again, validities, in the high .70's here. In some studies, particularly when we have a well-researched battery of instruments and we take it into a foreign language in a foreign country, we find that almost invariably we do a better job there, the validity is higher than it is in the United States, for a variety of reasons; you've got a much wider range of talent, to start with, and our foreign friends, being less sophisticated in these areas, do exactly what we tell them to do, so we get very, very good clean data, and they work very hard at producing good data for us. Does that tend to answer the question?

Thomas Bransford: In a way, as you did in your paper and you alluded to in your speech, the idea that you don't regard the selection as a one-time, ten-minute process...

Paul Baker: No.

Thomas Bransford: ... but as an accumulation of data over a long period of time. You also said that you have the advantage of multiple placement...

Paul Baker: Yes.

Thomas Bransford: ... so I assume that part of your success is that you use a lot of information that we'd ordinarily call criterion information, and say, well, yes, maybe we made a mistake in his initial placement, but, gee, now, now we know what he can do, what he's good for, and before...

Paul Baker: No.

Thomas Bransford: ... you get through, you don't have too many people you can't use somewhere, somehow.

Paul Baker: We attempt very strenuously to avoid the contamination of predictors. We are looking at, always the basic question, what is it that we can determine ahead of time, without any contamination of the criterion variables with the predictor variables? If you would examine our research in detail, I think you would appreciate the fact that we do avoid this contamination.

One of the reasons we're doing this five-year follow-up study now on this rather massive bunch of data involving some 3,000 cases is that we've been using these data in the developmental process of a number of these people and we're just at the point now where the data that we have are uncontaminated, but they won't be very much longer. It's going to be getting at - in other words - things have happened to people as a result of the predictions that we have made. It's happened at a very high level in the organization, so that the contamination has been kind of indirect. We will never be able to use these data in the future for any kind of statistical studies; in other words, our validity is going to go way up, because of direct contamination.

William Brown: I'd like to go back to Dr. Schiff's question and ask a little more from Dr. Bray on initial screening and testing, after campus recruitment. The situation I'd like to stress here is, you're a recruiter from a large city school system, you're critically short on teachers, you're at a university placement office and you're interviewing candidates and most likely in the next three or four rooms are interviewers from surrounding attractive suburban communities. These interviewers offer contracts, sometimes based on a fifteen-minute interview. As a representative of a large city, and remember the teachers are selecting the city, and it's very difficult to recruit them, what testing would you do in that connection?

Douglas Bray: If you are really in a situation in which you have very little opportunity to select at employment, which is the one you have outlined, then I guess I would not try to select at employment. I would try to select by attrition during the first year on the job. We have found, however, that interposing a short adjunct to selection, such as a mental ability test, does not interfere with recruitment. It may be, in fact, that making a job a little harder to get may cause more people to be interested in getting it. Even if some school systems cannot afford the luxury of selection at the moment, I still believe that research into how to select better teachers is still of great importance.

Rufus Browning: We recently had a change in our rules, which recognizes this factor, just brought up. We now permit a teacher to become a probationary teacher without a passing score in the National Teacher Examination, with the proviso that the teacher coming aboard sign a contract to take and pass the National Teacher Examination during the probationary period. Failing to pass the test during the probationary period is automatic termination at the end of the period. But this is in recognition of the point just brought up.

Perry Kalick: I'd like to point out that the staffing of the A.T. and T. assessment centers constitutes time, and that time is money...

Douglas Bray: We're wasting your money, as a stockholder?

Perry Kalick: No. There's no question of the worth of spending $300 to $500 per candidate, if you have potentially a $100,000 to $200,000, or more, investment in a candidate. Large city school systems spend only a small fraction of the, perhaps, $300 to $500 that business and industry might spend. I would like to follow up on Dr. Gold's comment on assessing the undergraduate training of a teacher prior to entrance. I've been supervising student teachers for two years in East Harlem, in the types of schools to which eight out of ten of beginning teachers are appointed.

The basic requirement is that the college supervisor observe the student teacher four times a semester. I have functioned more as a "resident" in this situation in that I have devoted a considerable amount of time to the training of these student teachers; i.e., I have observed each student teacher about twenty times in varying situations, including two full morning observations with the cooperating teacher out of the room.

I have found that student teachers who have undergone this extensive experience in reality are mostly rated considerably above average in their ability to cope with the problems that beset a beginning teacher in a difficult school, by the principals of the schools to which they are permanently appointed. I go along with A.T. and T.'s assessment center simulation approach. However, in the college situation there should be an opportunity to assess a student's teaching performance prior to the upper or even lower senior year. We need an early indication of a student's teaching performance so that we can tailor subsequent teaching experiences in accordance with a student's strengths and weaknesses, or perhaps have a basis for not admitting a student to student teaching. For some students one semester of student teaching may be adequate; for others, an entire year is necessary; and some students should never have gotten into the formal student teaching course. I'm suggesting that the college has a prime role in the initial screening phase of the teacher selection process.

Jay Greene: Thank you. I'm afraid that the time allotted to our panel has been used up and I do want to thank Douglas and Paul for their presentation from their background in industry. We are fortunate in having around the table people with varied experience and background, and we hope that this panel represents the beginning of a sharing of ideas, a give-and-take in discussion, in which all of us will be prepared to, perhaps, make changes in some of our basic thinking, and perhaps, chart new channels or new efforts. This is one of the most difficult things to do, to change basic thinking because everybody believes that what he's doing and the way he is doing is the best way. We hope that the two speakers here from industry will continue to share their thinking with us in all the problems that the panels will bring to us, and we hope that you'll participate as freely and as honestly and as delightfully as you have this morning. Thank you.

Session No. 3: Personnel Selection Practices in Civil Service
-procedures currently utilized
-validity of selection procedures
-relevancy of Civil Service selection procedures to selection of teachers

Chairman: Samuel Streicher, Board of Examiners

Bernard Berger, Department of Personnel, The City of New York
Thomas L. Bransford, New York State Civil Service Department
Raymond Jacobson, U. S. Civil Service Commission

Paul Denn: Could we ask you now to sit down, please, to recommence. Someone in the lobby reminded me of an old story about our mistakes. He pointed out that doctors bury theirs, lawyers bill theirs, and we promote ours. At this point, let's turn now to the practices that obtain in the various branches of Civil Service. I'd like to introduce a colleague, Dr. Samuel Streicher, who'll chair this panel. Dr. Streicher.

Samuel Streicher: I think that one reason for meeting far away from home is that we have an opportunity to relax and listen to what the other fellow suffers, find that his problems are very much like ours, and from it derive a partial consolation. We also get a chance to relax in attitude to the point where we're willing to entertain another fellow's point of view, and even to listen to the way he goes about doing things. And in this process there may arise a still small voice that questions one's own practices, the assumptions on which the practices are built, and, later on, urges us to entertain some modification of them. This self-reappraisal is all the more important in connection with the selection of personnel in Civil Service jobs, whether they are at the Federal, State or local level, whether they are in teaching or in non-teaching areas.

To make the transition from industry to teaching under Civil Service is quite a leap. You first must move from industry to teaching in areas in which in the selection of personnel there is no control other than a very vague one. Thus, the Superintendent of Schools of a given community will determine for himself how he'll select teachers, principals, directors of supportive services, etc., and if he asserts that he has no examination but merely interviews somebody, this person, as Harry Gilbert points out, has received his examination, though he doesn't know it. The Superintendent is not accountable to anybody but himself and his Board of Education; and, fortunately for him, the Board of Education doesn't hold him accountable, in the usual sense; if he made mistakes, well, that's too bad. The mistakes will eventually wash out after 35 or more years of service, unless the person is accommodating and quits or otherwise separates himself from service earlier.

When you come to Civil Service, with Federal or State and City laws setting boundaries, and when it's the policy of the people to make your decisions reviewable by others (usually by courts or commissioners of education), the temptation arises to create elaborate machinery, to become efficient in its operation, and then to find it downright uncomfortable to make changes in procedure and agonizing to change underlying assumptions and general design. There's the temptation to continue what we've been doing, and to become victims of our own procedures. That's another reason why getting together here, not only with representatives of industry but also with representatives of Civil Service groups at different levels will help each of us.

I assume that when we talk about the selection of teachers, we are talking in generic terms; thus, teachers would include supervisors, administrators, directors of special service branches. Some reference was made earlier today and late last night to the selection of people at the upper reaches. Second, we include within our consideration of the selection process the initial screening as to competence and the appointment policies that may or may not facilitate employment of the better people and may keep many a fine person from even making application. I believe that we also imply that retention policies determining the conditions under which people work, particularly with regard to morale (so badly abused a word), will come within the purview of our discussions. It will be easy for any one of us to defend himself and say, "That's the law." Well, first of all, we're not so sure that we know what is the law; even those of us who are in the know, are sure of one thing: we don't know the law fully; and second, laws can be changed, for they merely represent the policy of the people at a given stage and the policy may change.

Thus, as we proceed to examine ourselves we may think of the Biblical dictum, "Let us come and reason together," or more nearly literally translated, "Come let us become wise together." The latter connotes a receptivity, a mutual impact, and a hope that the spirit of exchanging, of willingness to listen, will drive away any temptation at defensiveness.

The three speakers for today have consented, under the dictation of the Chairman, to limit themselves to about ten minutes of presentation. They will not read their papers, though they prepared papers, then we'll open the meeting to discussion, not merely to questions addressed to the speakers but to a free-for-all, a tearing apart of the ideas presented. The first speaker will be Mr. Bernard Berger, who is Director of Training in the Career Development Division of the New York City Department of Personnel. Formerly, he was Principal Personnel Examiner of the Bureau of Examinations of the New York City Department of Personnel. Mr. Berger.

Bernard Berger: The selection of teachers and the other positions in the school system generally involve approximately, perhaps a maximum of about 100 different kinds of positions; in the Civil Service generally, City, State and Federal, the positions - the different kinds of positions - number in the thousands. We run the gamut of positions from those of cleaner, porter, laborer - whose starting salary is about 40 per cent higher than that of a beginning teacher in New York City - to positions which require, as a minimum, a Ph.D. and a certain number of years of experience. So you see, we have a very wide variety of responsibilities in selection. The selection methods used in the New York City Department of Personnel don't vary very much from those that are used in school teacher selection, in administrative selection, or in the selection methods used in private industry that were described earlier today. We have attempted and experimented with all of the kinds of tests that have been devised and developed by ourselves and by others in trying to select those who will be able to serve the City competenttly, perhaps creatively. We find that we have the problems that the teacher selection organizations have: they are not very much different. We've come to the realization that we have to experiment and we are experimenting and we have changed many of our methods of obtaining people quickly in shortage areas, of taking less than we normally expect, and of consulting with every possible resource to make a better selection method - a more appropriate selection method that will fill the needs, the staffing needs of the City. I'm not going to talk in detail about the kinds of tests we do employ. I just want to speak about the validity of our selection procedures, which was one of the areas in the assignment given to us in preparing for this conference.

(Mr. Berger now read his position paper which is reproduced on page 26.)

Samuel Streicher: Our next speaker is Dr. Thomas L. Bransford, Director of Examinations, New York State Department of Civil Service. Dr. Bransford formerly was Chief of the Test Development Section of the United States Civil Service Commission and has been President of the Personnel Division of the New York State Psychological Association and currently is President of the Psychological Association of Northeastern New York. Dr. Bransford.

Thomas Bransford: We can tell how we do things and how good the way we do things is for our purposes, and still miss the mark completely with respect to improvement of teacher selection. I had expected that my prepared paper would have been distributed to everybody. Now I find it has been distributed only to the other panel members and that we do not have time to read it aloud. The paper tells the framework in which we do our work, the various things we try to do, our chagrin at how little we know about how well we are doing it, and questions its relevance to teacher selection. First, I will skim the paper and then I will go beyond it to speculate on the things I think are wrong with teacher selection.

If we were talking only about the comparison of various kinds of Civil Service approaches to Civil Service problems, I would have a much simpler topic. I know and could explain some differences between the State system and the Federal system, and the City system and I could explain some differences in the American Civil Service system and various foreign Civil Service systems, many of which are based on accidental differences in law, differences in culture, differences in kinds of problems.

Basically, it's almost impossible to summarize what we do. We're very much like the octopus, who was asked how in the world he managed eight legs, and, of course, he was unable to move, pondering that problem. We are responsible for holding 4500 separate competitions, separate examinations in the course of a year. These are for some 3000 classes of positions in the State service, and 10,000 differently named positions in municipal services, which probably represent only several hundred really different classes. Our main concern has been how not only to meet the objectives of a public system, which is open to review and challenge by many individuals and interested groups, but how simply to keep ahead of such a tremendous work program.

Historically, the American Civil Service was based on a so-called competitive system, in which it was assumed that public jobs were in great demand and that many people were competing for the choice plums. Under such a set of conditions, very elaborate evaluative techniques might be appropriate, but as Superintendent Brown from Los Angeles pointed out in his comment in the previous session, one of the facts of life is that we are in an entirely different kind of labor market. We have great scarcity, and our problem really isn't the refinement of our evaluation techniques, which could be much more refined if we had more resources and more time. Under present conditions the competition is not among candidates for jobs but among employers for quality personnel.

There is an element in American Civil Service which differs a little from foreign Civil Service systems and from industrial systems in that the central evaluation agency does not complete the selection process. It has the task of coming up with a panel or a list of qualified candidates in a one-dimensional sequence, supposedly binding and relevant to filling any individual position in that general position class. One safeguard we have, and it is really not so much a matter of any recognized inadequacy of our testing program, but a matter of constitutional law. In most Civil Service systems in the United States, under the American theory of checks and balances, the Civil Service system is regarded as the creature of the legislature whereas the appointment process is regarded as the province of the executive branch. Attempts, in Civil Service practices and rules, to limit selection to the single highest ranking eligible have run against this Constitutional doctrine, the separation of powers, so that most Civil Service Agencies now allow an appointing officer, a representative of the executive branch, a choice from a limited number of the eligibles ranked highest for a particular class of jobs. Many jurisdictions have a rule of three. This rule of three is under attack, on the one side, by one set of pressure groups, and on the other by other pressure groups. I'm reminded of Luther Gulick's aphorism "Opposing pressures keep public officials upright." Our employee groups and our minority groups, generally, would prefer a much more rigid system, whereby there was no choice by appointing officers. Appointing officers often feel that they should be allowed even more latitude in selection from an eligible list according to their appraisal of the candidates in relation to their needs.

Mr. Berger has opened up this subject, so I guess it's fair to pursue it, that the promotion racket in the New York City Sanitation Department's appointments did not reflect at all on the evaluating agency, but on the appointing officer's choice among groups of three. Minority groups and reform groups often have taken the position that this choice of three, or proposed extension to five, does give an appointing officer a chance to play various kinds of favoritism with the class tie, or with the political affiliation, or in this case, something much more crass.

However, we can discuss the climate, and the conditions and the problems of evaluating people for the public service generally and still miss the mark completely with respect to the teaching profession. I'm reminded of "10,000 Careers," a study made by Dr. Flanagan's colleague, Dr. Robert Thorndike, in which 10,000 people who'd been tested in the Air Force Selection Program were followed up in civilian life. Surprisingly, those who ended up as teachers were characterized by low verbal and quantitative scores on aptitude tests. If we follow the reasoning we use in validating interest inventories to find more people like those who are already in a profession, we might select for teacher training, candidates with low scores on verbal and quantitative aptitude tests. But should we be bound by the kinds of people we now have in the teaching professions? Perhaps we have a real shortage of people who are interested in the conditions of employment that apply to teachers. I would surmise that New York City has more problems with the blackboard jungle image, whether it's a fact or not, as a deterrent to teacher selection than with possible inadequacies in the selection instruments. Until New York City teaching jobs can be as secure as the suburban schools are, it's a losing race as Superintendent Brown has pointed out to have more time-consuming and more elaborate selection procedures. What we must do is a bit of social planning. We must assess teaching potential, make the teaching profession more attractive to young people, and guide people with the potential for teaching success into this profession. When we have done these things, there will be more point to further refinements in the evaluation process.

To avoid misunderstanding, however, I want to make it clear that I don't mean to say that careful selection methods have place only in a surplus labor market; I think the reverse is just as true. When we have a shortage of fully qualified people, fully qualified in the sense of meeting all our desired requirements of education and experience, we still have a need to determine aptitude for on-the-job training and to direct likely prospects into training programs, possibly the type that Mr. Berger talks about, sidestepping or postponing certification requirements. When we in the public service got away from the idea that the only person worth hiring was somebody who's been let go by another employer in the same type of work, we not only greatly increased the numbers of candidates but materially improved the quality.

My personal experience with required education courses is limited and unfavorable. Of 2 C's I received in college one was in an educational psychology course taught in the Education Department. The psychological content of this course was obsolete and conflicted with more modern information from the psychology courses I was taking in the Psychology Department. What were the right answers in the Psychology Department were not recognized in the Education Department. I used the Psychology Department answers and did poorly on the final examination in the Education Course. The other C in my college work was based on two tests I can never forget. The course was in the psychology of philosophy and was taught by Edwin Ray Guthrie, a leader in psychological theory and later President of the American Psychological Association. The course covered the psychological content of the classical philosophers from Plato and Aristotle up through Descartes and Leibnitz. The first part of the test required identification by author of 17 passages and since we had studied the works of 17 philosophers, the students tended to attribute each passage to a different author. The correct answer was Plato 17 times. The other part of the final course examination was a true/false test in which we were to leave alone the statements that were true and to cross out the item numbers of those that were false. Most of us marked about half the statements false but the key was all statements true.

Samuel Streicher: Our third speaker is Mr. Raymond Jacobson, Deputy Director, Bureau of Recruiting and Examining, United States Civil Service Commission, in Washington. Formerly, he was a member of the Division of Standards of the Civil Service Commission, in Washington. Mr. Jacobson.

Raymond Jacobson: I think I would like to use the limited time available in order to permit the discussion to get under way, just to touch on three or four areas, not to really summarize my whole paper again, which you will get. One thing I would like to point to, in connection with the Federal Civil Service, in attempting to distinguish it from other Civil Service jurisdictions (because I think there are some differences, although there are a great many similarities) is that the Federal Civil Service Law has one tremendous advantage in that it is a very broad and general piece of legislation. In fact, we're convinced that the authors of this legislation, back in 1883, were extremely wise men, even though I've never heard of Mr. Pendleton's doing anything else in his stay in Congress. In this area, they wrote a law which was really a very broad statement of general public policy and basically this is the legislation we still are able to live with. It has made things easier in many ways, I think, than in some state and local systems, where they have been harnessed with much more rigid legislation. We do have a broad statement of public policy, which is basically that the purpose of the Civil Service System is to see to it that jobs are filled on the basis of merit, that the details and the procedures by which this will be accomplished are determined by rules issued by the President and regulations issued by the Civil Service Commission. This has given us flexibility over the years; so our system has changed, rather remarkably, I think, over the last 50 years, even more remarkably, perhaps, in the last 20. Our own concepts of what was needed to accomplish this basic objective have been sharpened and changed.

We also have another advantage, relating particularly to Tom's comments about the relationship of the Civil Service System to the legislative and executive branches. In the Federal Government, the Civil Service System is clearly a creature of the Presidency. This was not quite so clear when Tom was with us, some years ago, not because of legislation, but because of attitudes that had grown up in terms of our relationships with the Congress and the disinterest of the President, over the years, with the system. In the last 20 years, there has been an enormous shift in attitude. Now, we clearly have a situation where the Civil Service System, in all of its manifestations (not only in its recruiting and examining and selection program) is an arm of the Chief Executive and functions as an arm of the Chief Executive, not as an arm of the Congress. That doesn't mean we're not subject to Congressional appropriation and Congressional control; of course, we are, but no more than any other executive branch agents.

Let me turn from these differences to a brief characterization of a couple of principal points about the way in which we go about our business as it relates to the problem of teacher selection. We obviously have a very large system and we obviously are conducting examinations in the same way that the New York State and New York

City systems are for wide varieties of positions. We are the largest single employer in the country. We have many different sub-systems, really, within our total system, but I think the parts of the system that are most relevant to the subject we're talking about at this Conference are the parts of the system which relate to the recruitment, examination, and selection processes that go to the filling of our entry level jobs in professional administrative and technical categories. So let me dismiss the stenographers, typists and the postal clerks, the sheet metal workers, the plumbers and the welders, and so on. Let's talk about selection which is directed primarily at those people who have prepared themselves through higher education. We have basically two different ways of going about this job. I don't want to over-simplify, because it's obviously far more than two, but broadly speaking, we can categorize our methods as two. We bring into the Federal Civil Service about 20,000 to 25,000 people every year at the college entry level, the bachelor's and master's degree level. We bring them in again to a wide variety of jobs, including, by the way, some teachers. This is not a large employment category in the Federal Civil Service, but we have in our Bureau of Indian Affairs a very significant population of classroom teachers at the elementary and some at the secondary level. So we have some experience in this area, and I'll touch on that in just a little bit. But in this whole range of categories, basically we use two different techniques. For about half of these jobs, we use an examination known as The Federal Service Entrance Examination. Out of this we select between 10,000 and 13,000 people a year. We test between 100,000 and 150,000 people each academic year, and this results in this number of selections. This is a massive program, it's a program that involves general abilities testing, much along the lines that have been talked about here and it involves an evaluation of education and experience.

By the way, we have one restriction in our law that is troublesome, I should say, that most State and local jurisdictions and industry do not have, and that is we may not require education, as a minimum requirement, except for professional and scientific positions. So, for many administrative types of positions, we have to allow people to compete who do not have college degrees even though that might be the desirable way in which we would like to enter people. But for our professional jobs, such as teachers, engineers, physicists, economists, and so on, we do have positive education requirements. We provide for most occupations which we have identified as not in short supply and for which the test battery we use is appropriate, the Federal Service Entrance Exam as the method to come in. We give everybody this same test. We evaluate their backgrounds and code them in great detail as to what kinds of preparation they have, and then we selectively use this list of eligibles, depending on the job needs of the Agencies. For example, some jobs require high verbal abilities. We use the verbal abilities test score for selective use of the list. If there's a need for someone with specific training, we'd like to bring someone into an agency where the job demands require some business administration or accounting background, not necessarily professional accounting. We can look for people with, say, 12 hours in accounting, as an indication of interest. Agencies recruit heavily for a particular job. They identify people in whom they're interested in the colleges and we have ways by which, in a perfectly legitimate use of merit system procedures, we generally can find ourselves able to reach the people that are really in demand because they will perform well and they have a record that is appropriate for the job.

Now, in a large number of other categories, and this includes primarily the engineering and scientific categories we have found, unlike A.T. and T., that we haven't been able to get away with written testing. Here we have followed a procedure which is working extremely well. It's not getting us all we need. We have not yet found anybody who gets all they need of top quality physicists, for example, or mathematicians, or engineers, but we've done pretty well with this. It's a device by which our recruiter, who is an agency man, who is recruiting for his program, can recruit in the colleges where he can find the kind of talent he's looking for, and as a licensed rater, who can act for the Civil Service Board of Examiners, and rate the person on the spot, in terms of his faculty evaluations, his interview, and his college record, and can give this person a rating and offer him an appointment, if he's authorized by his agency to do so. Frequently, the delay here is more of a security delay, because so much of our needs are in the Defense Department and they decide they've got to check people out pretty thoroughly before they make an offer of an appointment, so we have a delay there, but this is not a delay through the recruiting and examining system. This system works well in the shortage areas. It involves consideration of the background of the individual, considering everything they have done and everything we can find out from their college records. In most of these categories, we do have an educational requirement, so we're dealing with only college seniors, or graduate students.

Relating this to teachers, we have a somewhat similar system in operation for the Bureau of Indian Affairs in its teacher recruitment program, in that we do have a device by which we give the teacher recruiters in the Bureau of Indian Affairs authority to make appointments. They work through our Inter-Agency Board in Albuquerque and they operate throughout the country in the recruitment process. They have a tough job because just as you have a tough job filling jobs in East Harlem, we have a tough job filling jobs in the Hopi Reservation in New Mexico and Arizona. Let me tell you it is not easy out there and in fact many of the problems are very similar, in that there's a cultural difference. Some problems are worse, in that there's isolation that is extremely serious and extremely tough to live with, for these teachers, who will teach in small schools; three or four teachers and a very difficult situation, 70 miles away on a bumpy road infested only with jack rabbits and snakes, 70 miles away from the nearest small town, which has the filling station, and I'm not kidding, I've seen these places. So we have a tough job selling. But when we recruit on the college campus, while we haven't been doing as well as we'd like to here, any more than you have, we've been doing reasonably well. We think this year we're going to do a little better because we think we've improved our methods. Basically, we are giving a great deal of weight to the evaluations of the colleges, in the evaluation of these people. We administer no tests. We're using the National Teacher Examinations as part of our evaluation and we are evaluating these people on the spot. Being able to make job offers, we sort of take care of the paper work afterwards. This is an interesting process, because paper work has killed us in the Civil Service system for a long time. We have, in shortage categories, learned to reconcile ourselves to the fact that paper work really is just a matter of getting the records straight later because everybody we can possibly interest in the job, whom we would like to have, can have a job if we can possibly get them to accept it and report for duty. So we don't pay too much attention to the paper work, as I say, we clean it up as we go along, and we don't allow that to get in the way of what we consider the primary job, getting these jobs filled. I hope that this procedure, or other ideas that have been discussed around here will be useful in further discussions during today and tomorrow. Thank you.

Discussion

Samuel Streicher: The floor is open for discussion in the form of questions or comments.

Ralph Walter: Mr. Berger raised the question whether it is necessary to have specialized training, to take this into consideration. Now this is a real problem with college preparation, because there's increasing pressure for us to prepare students for specialized fields like urban schools, schools for the disadvantaged, emotionally disturbed, and so on. From the point of view of selection of teachers, would you people who are involved in this prefer to have someone with as broad a general training as possible, who would receive a specialized training when they are on the job, or would you prefer them to have some degree of specialized training first?

Samuel Streicher: Anyone care to comment? Would you want to elaborate on the question with regard to what's meant by specialized training in the pre-service period?

Ralph Walter: I presume this is fairly common in many of your colleges, this pressure for training teachers to teach in urban schools and some schools have developed a rather elaborate program, where they get special training in this field. Is this essential or is it better to have a teacher who is generally qualified and then gets some special experience and in-service training for urban schools.

Samuel Streicher: Any of the people engaged in programs of teacher training care to comment? Please.

George Redfern: I would like to try to answer the question. As a former personnel director, I would have welcomed specialized training for the inner-city because the market research showed 60 per cent or more of the vacancies to be filled were in that area, and I must say that most school systems have struggled to have their in-service programs adequate to re-train. There's another very practical problem, that in the highly competitive market, it's academic sometimes to say to do it in the in-service method. If you don't, you can't hire them from your competitors anyhow. So, therefore, the elusiveness of many of these candidates and the competitive market make it an academic question as to whether you can have a real, honest-to-goodness in-service program, so to answer your question, I wish we could have some specialized training, as much as possible. It would facilitate - and I recognize your problem.

Harry Gilbert: I'm Harry Gilbert, Pennsylvania State University, Brooklyn, New York. I'd like to comment on a couple of seductive points that were made earlier. We're never going to get away from some value judgments, despite all of our announced interest in hard research. But two points were made that I think are going to call for some value considerations: one was Mr. Berger's that we should not make tests public in the Board of Examiners, for example, which means you can re-use them and refine them, getting better and better tests. The second was that we should hire any college graduate and then train him to become a teacher on the job. Now both of these sound very attractive on the surface, but I want to comment on some of their hidden meanings.

In the first place, the Board of Examiners I know is unanimous on this, takes the position that when you're hiring in the public service, you have a responsibility to tell anybody who is rejected exactly why he is rejected. If you are going to keep your tests secret and refine them, etc., a person who is denied a job, cannot look at that test, know exactly which items he has failed, and file an appeal, if he thinks he has been improperly selected. We take the value consideration that in the public service any applicant has this right of seeing why he's rejected and a right of appeal. So I think it makes the job a great deal harder, not just a little harder, but I think it's a necessary part of examining in the public service.

Secondly, this business of hiring any college graduate and then making him a teacher comes to the heart of what I think is a real derogation of the teacher in our society. I work now for a real hard-boiled Dean in the College of Education at Penn State, Abraham Vander Meer. He used a figure of speech I'd like to present to you. He says, when I hire an architect to build my house, I'd like to have someone who is conversant with Camus, who knows the contributions that a Matisse has made to our aesthetic taste, knows all about some of the avant garde musicians, etc., but first of all he wants an architect who knows thermodynamics, and makes sure he puts into his house the properties that will make it resist the weather properly. Then he can have all the other characteristics. The same thing applies to a teacher; if you think a teacher has to be one who knows children, knows how to present the subject matter which he knows thoroughly, this calls for a pretty highly developed integrated series of preparation. When you say let's take anybody, since we're in a shortage, you're downgrading the need for this total preparation, and in fact, you may be doing yourself an injustice. I think Doug Bray made that point. Don't sell yourself too short. In the long run, if you stick to the standards that you require, that in itself makes it attractive. So I'm going to keep yelling, even though one side of me is very much devoted to research, to the need, too, that we don't discard plain hard thinking and coming up with some values that we think are indispensable.

Raymond Jacobson: On this issue of the publicity of tests, I just want to indicate that I agree with you that in a public system any applicant has the right to reconsideration and appeal, has the right to know why they are ineligible, if they are, or why they got a 72 instead of an 83. We in the Federal Civil Service, and I think this is true of most Civil Service jurisdictions throughout the country, state and local, do not feel that in order to meet that obligation, it is necessary to publish our tests and to throw them into the kind of controversy that I think we get into that way. We've had no trouble with the Courts. We get an appellant who wants to find out how he did in the examination, the whole test rolled out in front of him. We tell them in which way they were weak, in which way they failed, we don't go over it question by question, and I think this public obligation can be met without regard to this kind of unnecessary openness.

Bernard Berger: Dr. Gilbert knows that up to July of this year we published most of our examinations. In fact, the Board of Examiners I think adopted our policy of publishing examinations sometime ago, but we have come to the realization that we're not doing ourselves a service as a selection agency in constantly pouring out our energies and writing new equivalent examinations which are not equivalent. We probably have as elaborate an appeals procedure as any jurisdiction has. It is quite likely that we have been involved in more litigation than most other jurisdictions, so we are particularly cautious in our test and appeals procedure to avoid litigation as much as possible. We do provide, for example, every candidate with a blank numbered sheet where the candidate, on a multiple choice kind of examination, can list his answer as he goes along, and take that home with him. We publish the key answers, the tentative key answers, so that almost immediately a candidate can tell whether he has passed or not; secondly, we allow candidates to see the questions for which they were marked wrong -- only those -- and the candidate has an opportunity then and there to appeal or to come back again with some reference material to support his answer. We also know that in our test-wise population in New York City, candidates, if they feel that there is a true grievance that should be rectified, and if we have opposed their contentions, they go to the Courts. There are many lawyers in New York City who are willing to take these cases on some contingency basis. In this way the problem of appeal is pretty well handled. This is true, even more so, in the State Civil Service Department where a candidate can on occasion take an expert along with him to look at the question. So the appeal procedure is still there.

Thomas Bransford: May I speak to this -- I hate to leave to our most recent convert the job of proselytizing the Board of Examiners on extending the useful life of good tests.

We have been able for years to play one-upmanship with our colleagues in the New York City Personnel Department by saying that if the City Civil Service hit upon any good questions, they would immediately throw them away. We can't use that jibe any more. The State's examining program involves many candidates from New York City as well as upstate. We do have a system which, in some ways, is more rigid, more secure than the New York City system. It's true that we do allow consultants to accompany candidates in reviewing some of our tests. Some of our tests have been exempted from any review. A clerical review of answer sheets and key answers without access to questions is generally allowed. In some examinations we allow candidates who are willing to travel and make special arrangements to appear at special centers the week after a test has been held to review the tests and tentative answers under secure conditions to point out what they believe are errors. Some of our candidates are urging us to follow the New York City practice because they are not sure what answers they gave, and don't know whether or not to object to the tentative key answer. We feel that one of the virtues of our system is that objections are not merely self-serving. Another virtue is that the exposure of the test questions is more limited in time and in place. In examinations where we allow review of both the test questions and the scored answer sheets, some candidates complain because we do not allow them to take tests home for extended research. I would like to join Mr. Berger in urging those whom Dr.

Gilbert left behind at the Board of Examiners not to be stampeded by the Civil Service employee press away from constructive changes in policy and procedure for safeguarding and reusing their best test questions.

Harry Gilbert: Tom, I apologize; I meant to attack you, too.

Gertrude Unser: It just seems to me that you can't have it both ways. Either you keep your tests completely secure, which means that nobody may see them, that is, use the kind of procedure which the State Department uses in administering scholarship examinations, whereby each booklet is numbered and is put into an envelope, and even the people administering the test may not see them or you allow some form of appeals procedure. As soon as you allow any form of appeals procedure, to that extent, security has been violated. One person may look at Item 10 and the other one at Item 50 and so on. People can put these together. I don't think you can straddle this issue and pursue a middle course. You can deceive yourself that you're keeping them secure, but you're really not.

Jules Kolodny: I'd like to tie some loose ends together and then throw it out for reactions. For example, one of the speakers, I don't remember who it was, mentioned that there ought to be a broad recruitment area, and then a subsequent person, I think it was Mr. Jacobson, talked about the teaching examinations they give in connection with the Bureau of Indian Affairs. The National Teacher Examinations would meet the demand for a broader recruitment area.

A third speaker, for example, spoke about the evaluation of training prior to job placement. I would urge that perhaps we ought to re-examine the kind of requirements we have. Traditionally, the courses that are held in lowest esteem on the American college campuses are the ones that examiners in teaching require. By and large, these are the courses that are not held in the highest esteem. Now, I would wonder whether we couldn't really re-examine and talk in terms of the kind of courses that might be required in terms of urban sociology and let some of the "how" courses be things that are not taken in college but are learned in service while on the job. I know that so little is done in other professions in terms of how to handle situations, but a body of real knowledge in subject matter must be learned in the law, for example. Law schools will devote a minimal amount of time, whereas schools of education tend to devote a maximum amount of time on "how to do," but people may not know the subject matter which they're supposed to teach.

If you have a broader recruitment area and a re-evaluation of the kind of training you require, you might consider giving the

National Teacher Examinations as a Civil Service hurdle. You would have to consider what Dr. Streicher alluded to, namely, that the job must be made very attractive. We must make the position such that we want people to move into jobs which will have holding power. That's a matter which the superintendents and Boards of Education have to concern themselves with rather than selection officers. Once that is done, you may be able to have a very substantially high cut-off point on the National Teachers Examinations. Our particular community may take people who score in the top decile, and that's our cut-off point because the conditions in our school system warrant our being this restrictive. On top of that, you must tie it in with the type of thing Dr. Rivlin indicated and some other speakers have alluded to, namely, there should be an on-the-job training program. I'd like to think of it as an internship program. The medical profession, for example, talks of an internship program; we, on the other hand, go through what we think is a very careful selection process, and then we throw the beginning teachers into a full program, close the door, and he's all alone with a group of youngsters, never having done anything like this before. I should imagine that if we tie some of these loose ends together and make a complete "gestalt" in a broader recruitment area, using the National Teachers Examinations, with very substantially high cut-off points, and have a type of internship program where the teacher teaches a shorter day and has enough time to observe his colleagues and to talk to his colleagues and then is evaluated at the end of a given period of time while he's still a probationer, you're more likely, rather than less likely, to get the quality personnel you're looking for.

Harold Mitzel: There's still one loose end in Mr. Kolodny's remarks, and that is the modern teacher education curriculum. It is not true that the teacher education curriculum is loaded with methods courses, although that may have been true some years ago, but I'd invite him to take a look at a teacher education program and he would find a minimum of courses which he describes as "how to" courses.

Milton Gold: I think we have to distinguish here between things that we are looking for. In terms of preparing teachers for the inner-city, we discovered at Hunter that the most meaningful things that we do are to provide students with first-hand experience in the situations, so that they're not afraid of it, that they can see if they can adapt to it, and that they can cope with the situation that they have to face.

We also know that, in looking for the prospective teacher, we're looking for a person who has a commitment to teaching and, in the case of New York City, who has a commitment to work in what may not be the most pleasant teaching situation, in terms of absence of pressure, tensions and so on. These things are quite at a variance with the kinds of things that we normally test for, and it isn't a question of whether there's any test security or no test security, the question is how do you find this commitment, how do you provide a program of experience and training? Are we asking the examiners, now, to step out of the role of a narrow kind of examining and to partake in the problems of pre-service and in-service education?

In line with what Mr. Kolodny mentioned a few moments ago, one of the interesting things we are doing is in cooperation with the Board of Education, working with some 25 teachers in Central Bronx schools, where they are given a reduced program, so that they may have some time to confer with each other and to work with people who are providing some kind of supervisory or academic assistance. On the one hand there are the cognitive things that Mr. Kolodny has mentioned, and nobody disparages the importance of it; on the other hand, the importance of survival in the school system often doesn't have much to do with whether a person is in the top decile of a test that's cognitive in nature.

Raymond Jacobson: I just want to clarify something and to just add a point which may help with this area. The clarification is that I didn't want to imply that in our recruitment of teachers in the Indian schools that we rely exclusively on or require National Teacher Examinations. What we have done here is this (and it seems to me some of the comments we had this morning from our industry people lead in this direction, or indicate that this is the direction that might be valuable for the profession as a whole), what we've done is that we've identified what we're looking for in a teacher in an Indian school. We've identified this in a series of job elements. I don't have them in front of me, but there are something like six or seven; one of them, of course, is knowledge of educational methodology; another is ability to apply that methodology, and so on.

We have used a variety of alternative measuring devices to satisfy, to consider these different requirements; for example, a National Teacher Examination Test score will have some value in saying what somebody knows about whatever that test measures, and we don't want to throw it away, we want to accept it if the person has taken it, but we don't require it, because they can demonstrate this knowledge in another way. They can demonstrate it by completion of work with high class standing and high teacher recommendations in education programs. So that what we've done is set up a series of the important elements, the key elements in the job, that are needed for job success, and we've had a whole variety of measures against these. Now, it so happens that we haven't included in this variety of measures a written test that we administer. We will accept others. For example, we're interested in performance on the graduate record exam, which they may or may not have taken. If they've taken it, we want to know about it, it's part of the total record of the individual. We provide, in what we call an unassembled rating schedule, that is evaluation of experience and education, for a whole series of alternatives.

The evaluations are made by the panel members who are themselves supervisory teachers, principals, people in the education program of the Bureau of Indian Affairs, and they've all agreed on this rating procedure. We've had an extensive training program with them, so we understand each other on this. They operate as the Civil Service Agent, even though they are not Civil Service Commission employees, and they conduct the evaluation, and what they do is use this whole battery of information, to decide on an actual numerical score for each applicant.

Murray Rockowitz: I'd just like to make this caution. We talk in terms of teacher selection, as if there is a teacher that we're after. I'd like to cut across the comments of four or five people this morning. It is a problem of criterion. I think that's basic, but the question is - criterion for what? Dr. Gold alluded to programs, teacher training for the inner-city, and I think that what's necessary for us to determine is some kind of base which represents for Mr. Jacobson entry into the public service. Then after you've made the determination of this base, you try to wed the particular qualifications of the entrant to the task involved. Now, somehow, research has to set up a number of criteria for the various kinds of demands made on teachers in various areas. I think that we would agree, for example, almost a priori, that the qualities in the teacher necessary to teach a bright child are different from the qualities that are necessary to bring out the best in the underprivileged youngster who hasn't been able to be identified as either bright or not bright because we don't have the instruments to do this. I think that this caution ought to apply to all our considerations here, and it should probably influence some of the research lines of attack that will be delineated tomorrow morning perhaps. That's one of the reasons why I take exception to the National Teacher Examinations because, unless they can serve to determine the basic minimum from which we start to examine to meet all the variations on the theme that are demanded by the schools in the urban centers in the world today, we're going to put the imprimatur on an individual and then find that he just doesn't work out in many demanding situations in the urban centers of our time.

Jay Greene: I want to say for Art Benson, whom I have heard talk on this subject very much, that he regards National Teacher Examinations as a screening device to be followed by other types of screening, but I should also want to make clear that what we have been talking about in New York City and other places is actually a simple screening device. It is not test selection, where we say at the end of this procedure, we now have selected somebody who is a good teacher.

Strangely enough, in New York City we are less prone to say that than somebody who uses informal selection methods. The informal selector may go into a college and have a ten-minute interview with an applicant, look at his record, and make a decision mentally, if not verbally, that he has picked somebody who is sympathetic to children, who knows how to teach, who is going to be a successful member of the community, and a successful member of the staff. We don't believe that you can go that far in that sort of situation.

We believe that a teacher of English should have a background in the subject of English, and so we have a not-too-difficult screening instrument, similar to National Teacher Examinations', which has a national reputation to see whether these would-be teachers have a minimum knowledge of English. Strangely enough, many of them don't. In these tests, you find that, on a basis of about 1 to 100 per cent, some get 20, 15, 30, after completing college as English majors. Therefore, this is a necessary preliminary screening. Secondly, he should have a knowledge of fundamental methods of teaching, enough to walk into a classroom and proceed to teach.

We also have an interview. In our interview, we don't aim to judge whether the person is a warm, capable, wonderful teacher, whether he's going to get along well with children, or whether he's going to motivate them properly. No, it's a simple screening device based on this major premise, that a teacher should be able to communicate with reasonable clarity orally. That's about all that is being measured in the interview. And I think, using value judgments that Harry Gilbert talked about and not research, it is generally agreed in the profession that the vehicle for teaching very often is a teacher's voice, the teacher's speech. If the teacher is going to teach in a muddled way that is unclear. There, again, we have the minimum screening level, to convey thoughts professionally, with reasonable clarity, and so far as personality is concerned, only those fundamental things that may show up in an interview may be commented upon in the interview. What we're talking about now, really, is what some of you have been urging, a minimal screening device which, with value judgments, we can feel is essential for a person who is to step into a classroom. After this, let the administrators take over in a probationary period. That's all we have been doing, and that's all we're talking about.

Samuel Streicher: We have about four more minutes. Any further comments or questions?

Bernard Berger: One of the things that was very briefly mentioned by Mr. Kolodny was "holding power." I deliberately avoided mentioning this in my presentation, but I think it's something that merits consideration by any group discussing selection methods because no evaluation and no determination of appropriateness of selection methods and recruitment of teachers is worth anything unless you can hold onto or retain the teachers. This, of course, opens up a host of problems which go beyond an attractive salary. The provision of in-service training, the necessity for cooperation among the supervisors of teachers, in their dealing with a new teacher, the entire work situation, the promise that the job holds in terms of satisfaction for the individual teacher, and so on, and very relevant problems. I don't think that you can possibly do any kind of evaluation, unless you speak in relation to turnover in the school and to retention of teachers.

And by the way, in our giving the more general kind of entrance examination for professional positions in New York City, implicit is a minimum of a one-year trainee program or an internship, where most of the time is devoted to formal training and a series of rotation of assignments, in order to first, allow the individual to determine if this is really his place; and second, to determine whether we want to keep that person. All of these positions carry a one-year term, prior to a permanent appointment, which also includes a probationary period.

Fred Williams: I have one question I would like to ask Dr. Greene in the light of what he said. I'd like you to recall, Dr. Greene, the Chairman announced approximately 3-1/2 minutes ago that we only had four minutes, so you have 20 seconds to answer. What do you see is the particular advantage of our testing procedures at the entrance level? Over the National Testing Examinations, if at all?

Jay Greene: Just three or four. Art says his is a screening. It doesn't include any oral phases but we do have an oral. In some areas, as health education, art, and so on, we have a performance test as well, and then what was mentioned before. We have felt obligated to release our questions to people, so that they might learn where their errors were, and improve; whereas the National Teacher Examinations have security measures which prevent the releasing of the tests. These are the major reasons.

Samuel Streicher: May the Chair be permitted a brief peroration? We have placed on the table the many considerations that should be brought to bear on the question of the selection of educational personnel. We've barely mentioned all of the important considerations. The knotty problems that grow out of these matters will be discussed later, I hope, in greater depth. Those who planned this program were really wiser than they knew. They brought on an interdisciplinary interchange from business right through education. If I had the time, I would have told you of some of the experiences of mine in East Africa, where Standard Oil of New Jersey had a representative who did recruiting. He said to me, "What can I do when the President of the Republic says, 'You must employ 25,000 of my citizens in your various gasoline station, or else'?" It was just a condition, don't you know, in the climate of employment that may bowl over all other considerations.

We've run the gamut from the initial informal selection in the teacher training institution right through the last stage of dubbing a person as permanently appointed and entitled to various tenure rights. Shelley said, "We look before and aft, and pine for what is not." Later on, we'll try to satisfy some of the pining by asking for what should be better selection processes, and what else we must do to find out about them.

Paul Denn: Thank you, ladies and gentlemen. The meeting is adjourned.

Session No. 4: Desirable Policies and Procedures for Selection of Teachers

Chairman: Arthur Klein, Board of Examiners

William B. Brown, Los Angeles City Schools
George Redfern, American Association of School Administrators
Albert Schiff, Detroit Public Schools

Paul Denn: We had a full session this morning and we have another one this afternoon. This afternoon's session is one which will focus directly on the problem of policies and procedures in the selection of teachers themselves. We have two panels, one of them dealing with the policies and procedures for teacher selection, the other with criteria and the problems of validating such procedures. The first of these will be chaired by my colleague, Arthur Klein.

Arthur Klein: I think I express the point of view of most of the people whom I have spoken to when I say that thus far, our conference has been a very stimulating and provocative one. There are a number of questions that I should like to see answered by my own board during the next few months, and I'm sure everyone else who is engaged in personnel work or in teacher selection will take home with him some questions that he will want to deal with locally.

In discussing teacher selection and the desirable procedures for selecting teachers, we are very fortunate today in having three men who have been intimately associated with these practices and procedures in three large cities. Associate Superintendent William Brown of Los Angeles, George Redfern, in charge of personnel in Cincinnati for many years and now the Associate Secretary of the American Association of School Administrators, and Albert Schiff, who is Director of Personnel in the schools of Detroit. I know that our own Deputy Superintendent, Theodore Lang, who is with us now, will be very much interested in hearing of the ways in which these gentlemen have met the problems that beset every large city in the country. We'll begin with Associate Superintendent Brown.

William Brown: Thank you, Mr. Chairman, and thanks to our New York hosts for including two of us from Los Angeles. We're glad to be here in the Catskills, have some real fresh air for a change, and attend this very worthwhile conference. I felt this morning's discussion, the presentations, and the questions and comments gave us very basic guidelines for the selection of teachers. I hope earnestly that the full report on this conference will be sent to us. It is a landmark in the study and development of ideas for the preparation of teachers. I hope some day Los Angeles can get federal financing for a similar conference. I'm very serious about that. I think it would do us good in the West.

We personnel people live in terms of our situations. If I say some things that seem a little out of line with what is desirable in some of your districts, forgive me. It may be just plain Los Angeles.

Our district persently has 800,000 pupils, with 25,000 new pupils a year. Elementary, secondary, and college teachers total approximately 25,000. Our school district serves a sprawling area of almost 800 square miles, roughly twice as large as the city of Los Angeles. It includes, aside from the city, 11 nearby incorporated municipalities and also some un-incorporated county territory. On a north-south axis, one can travel approximately 60 miles from the northernmost school in the San Fernando Valley to the southernmost school which is at the Log Angeles Harbor in San Pedro. The Los Angeles district serves areas of wealth, but also major areas of poverty. Almost 200 of the 599 schools are located in disadvantaged areas. We have peculiar problems of recruitment. San Fernando Valley, a very fine suburban area, has a continuing surplus of teachers. The south central city has a continuing critical shortage. To date, we have been unable to get the surplus teachers in the San Fernando Valley to go to the critically short areas. We also, as you can see from the brief description of our district, have transportation problems. These long distances make the matter of assignment and transfer of teachers one of the most important phases of staffing our school system. In addition, those of you who have been to our area know that on three sides we're surrounded by very attractive communities, starting with Santa Monica at the ocean, Long Beach, Orange County and Disneyland, around to San Marino and Pasadena. The freeways make access to these districts very, very easy. Those who take our examinations and get high scores, if they don't like Los Angeles, find it's a very easy ride to Pasadena. Placing the score from the Los Angeles exam on the desk of the Personnel Director and a short interview often result in a teaching job. Very briefly, that's the setting for my comments on our situation.

We need 5,000 new teachers a year at the present time. The most serious need results from the recent doubling of elementary demand due to compensatory education and an increase in turnover of our teachers. The recruitment program has had to be expanded in a major way and is continuing to be expanded at the present time. We are adding to the staff. We are trying to add ideas and programs, and to work especially closely with our teacher education institutions. We feel that they have a much more vital role in this entire process than we formerly realized, and I liked the comments this morning about the necessity for strong preparation for the profession of teaching. The preparation cannot be done on a shoestring. I feel that there must be a very strong alliance between the colleges and universities and the public schools, a much closer working together, planning together, in terms of shortages, recruitment and kinds of teaching assignments in our school systems. One or two examples have given me great encouragement. The University of California at Los Angeles now requires every student teacher to have half or all of his student teaching in a poverty area in our school system. This has been one of the most heartening things that has happened to our system in a long time. It's really helping our recruitment. I cite that merely as one example of the things that are taking place increasingly between the Los Angeles City Schools and the twelve surrounding colleges and universities which are our primary, and one of our best, sources of new teachers.

I've put on the wall a chart of the five phases of the recruitment and selection of career teachers. I hope these five phases reflect some desirable policies and procedures.

The first phase is the recruitment program. There are the regular programs: 1) California campus recruitment--Our staff visits approximately 35 colleges and universities in the state, two, three, or four times a year, depending upon need. 2) Out-of-state recruitment now includes visitations to over 200 colleges and universities. The special recruitment programs are used increasingly in terms of shortages and inner-city problems. One program involves internships. This is a program whereby a college or university, working closely with a district, invites mature adults (housewives, members of other professions, and the like) to return to college but not to the campus. These are baccalaureate degree graduates who have had no teacher training. They are invited to prepare to be teachers by focusing teacher training, not only student teaching but courses in professional education, in a school in a disadvantaged area. We have 180 enrolled in one such program.

Talent search is another program. This involves direct recruitment of baccalaureate graduates, which was necessary last summer to meet the elementary shortage. Operation Return is still another. There are always teachers in the community who can be drawn back into the profession.

The newest recruitment program that we've added, and if we don't add one every few months I'm surprised, is recruitment in Europe. We have found that there are approximately 700 teachers returning each year from the armed services dependents schools. Many of these have separated from the school systems in which they taught before they went to Europe. Through an arrangement with the University of Southern California, the Los Angeles City Schools will interview in Europe for recruits for this program. We have gone to Hawaii Mr. Baldwin can tell you of his experiences there in seeking teachers

Recruitment is a very difficult business. The competition is keen. We have to search out and proceed in every way we can to help our school system get superior teachers. That, briefly, is our recruitment program. As I tried to emphasize earlier, that phase of the program will not succeed in its objectives unless there is a very strong alliance with the teacher education institutions. There are several forces at work trying to get our school system to take over its own teacher training. That is not our business. Our business is staffing the schools and teaching--not teacher training. At least one member of our State Board of Education would like to have Los Angeles relieve this shortage by general hiring of baccalaureate degree graduates, and training them to be teachers through the resources of the school system. We have to do some of this in critical emergencies, but we want to keep such hiring down as much as possible.

The second column of the chart outlines the first appraisal. This is the interview and contract offer by the recruiter. The recruiter may see the candidate in New York City, Chicago, anywhere in the U. S.; he may see the candidate on a campus in California. We go just as far as we can toward a contract offer at the time of interview. Personal qualifications are always appraised, and if all the college records required for appraisal purposes are available, an offer of a contract may be made at that time. On our local campuses, where the records are complete for our purpose, we not only offer the contracts, but the candidates, if they accept, talk immediately with our Assignment Administrators regarding the schools in Los Angeles where they may teach. Phase One, the recruitment, is the reaching out, the searching for teachers; and Phase Two is the interview, drawing them into the school system if they are evaluated as being qualified for one year of service, the initial employment.

The next phase is the tryout year; that is the third column on the chart. This tryout year is extremely important, and I was very much interested in Dr. Bray's response this morning, when he emphasized the attrition in a tryout year. This is exactly what is happening in our district. We know that, with the kind of initial appraisal we have to make, there is going to be a definite percentage of the new teachers who can't make it, who aren't qualified for regular service. Approximately 9 to 10 per cent of our new conditional or provisional teachers receive no better than average ratings, with the probability that a very substantial percentage of this group will not make it. They are encouraged to resign, and many of them do resign from the school system. Now I might emphasize that during this tryout year we see just as great an obligation on the part of our staff as on the part of the new teacher. The teacher must prove himself; he must get ready for the formal examination. We must help him to know the Los Angeles school system, its philosophy, its curriculum, its teaching methods. This is extremely important, I feel, as a selection device, the two-way street during this conditional year of service. It's a probationary year under State law. We can't counteract that, but the condition for continuing on into a second and third year of probation is successful passing of the formal examination. That is phase four, the most important one in maintaining the high standards of our school system.

All elementary teacher candidates must pass an English Usage Test to continue on to other phases of the examination. An objective test covering basic subject matter areas, methods, techniques and philosophy, has a weight of 30 per cent. An evaluation of training and experience by a committee has a weight of 40 per cent. A second committee evaluates personal characteristics.

Now running all through this, there is a central strand of importance as far as we are able to ascertain from our correlation studies. The central strand basically starts with the strength of the recruitment program, whether the recruiter makes sound judgments in terms of qualifications to enter service, whether we unearth well-qualified candidates. If we can't, the whole process falls down. The judgment of the principal during the tryout year, as to whether the teacher is performing up to standard, as reflected in the performance report, becomes the most important factor in the formal examination as far as our studies have indicated. Now what we have here is a dual system of selection, an initial selection and then a formal screening during the tryout year. In the past, a number of years ago, we had just the formal examination system. It didn't produce enough people to staff our schools. Our operating divisions, elementary, secondary and college, strongly favor the dual system. They want the Personnel Division to get good people, after initial screening, into the school system. They want to try these people out, help them get started, and be perhaps the most important factor in determining whether they stay on and become career teachers. So this is the heart of the selection program. I think it is desirable for our system. Whether it is good for any other districts, I have no idea. This double screening system makes a heavier load in processing, but there are some clear indications that it is working well for our school system. The fifth and final phase is the second and third year of probationary service which provides the final appraisal before the teacher enters upon a career job. Very few teachers are terminated during these two years of service.

Briefly, that's the way we select in Los Angeles, I've learned some things this morning that have already given me clues as to where this procedure can be strengthened. I won't go into those now. I found particularly helpful some excellent points on teacher education and the great importance of a closer working relationship in terms of recruiting early in the college career, in the freshman, sophomore and junior years, and getting better records in the college as a sounder basis for our recruiters to appraise these young pelple before we decide whether they should serve with us.

We have a number of problems. One is the necessity for the dual screening. Another involves the credential problems which the state imposes on us. Los Angeles requires 5 years of preparation for all teachers, elementary and secondary, and trying to keep a five-year standard in the present period of critical shortage is extremely difficult. We have considered requesting the State to give us our own credential structure.

We have problems in training provisional teachers. Four hundred were hired in mid-August to relieve an elementary shortage. We had two weeks in which to give them intensive training in our schools--that wasn't enough. We have master teachers helping them, but some of them are not succeeding. We hope the majority of them will make the grade.

A third problem is that of competition with our surrounding districts. How a large school system can hold onto the good new teachers it gets, I don't know. Our turnover rate for new teachers is fairly high. We know that salary is an important factor both in recruiting and holding teachers. We believe our district has to have one of the highest teacher's salaries in California, just as a phase of a good selection program. Our minimum now, with a baccalaureate degree and no experience, is $6,220 for the first year. We feel that salary must be at or near the top in a state for a large city, which has a definite part of its district in poverty areas, to retain high quality teachers.

There are some favorable factors in the picture at the present time. College enrollments are increasing in our area and we are encouraged by this. We believe in building up the prestige of teaching, doing the right kind of recruitment job and getting out into our colleges more. I find, as a recruiter for the Los Angeles City Schools, that one of the first places that I have to go in a college or university is the president's office. The president must be in on the organizing of the college to help teacher education prepare young people for the jobs we have available. It can't be placed upon the Dean of Education alone. He needs the support of the president, and all the faculty.

The innovations in teacher training are very encouraging. I believe this is a vital part of desirable selection. Many new and promising programs are evolving in our colleges and universities.

We should plan for the return of former teachers to service. I think the only way we will meet the problem of good staffing is to think of every young woman who enters elementary teaching in Los Angeles as a possible returnee. We know she won't stay too long in most cases, probably two to six years; then she will be out five to ten years to raise a family; and then she may return to service. When these women return, they are typically stronger teachers than when they left us.

The compensatory education programs, and we in California fortunately have several State programs that are helping out, are beginning to make teaching in the inner-city more attractive, by lowered norms, increased remedial instruction, and specialized assistance to the pupils in various fields. Something is happening here in the United States in our large cities that I believe is going to be an important factor in drawing strong teachers to the central city and encouraging them to stay there. I go into the classroom in school after school, and see a teacher with a small group of children around her learning the elements of English. This is heartening and our teachers are enjoying this kind of service.

We have had excellent community response to recruitment appeals in the face of shortages. I believe that our communities can work much more closely with us than we have asked them to do in the past. When we reached the middle of August this past summer and found that we were 800 teachers short, we had already gone through all of our existing recruitment programs. There were no more teachers available. We went to television; we went to radio; we went to the newspapers. Nine hundred applications came in, and 600 were employed. This was one of the most heartening things that has happened in our school system.

Mr. Chairman, I think that very briefly tells you what we have been trying to do and the direction in which we're working. I haven't gone into details on the parts of our examination program. I believe we heard some very important things this morning on that.

I want to repeat that this has been a most worthwhile experience for me, and I want to thank all of you for the opportunity to share with you in this conference. Thank you very much.

Arthur Klein: Thank you, Dr. Brown. I'm sure that there will be some questions later after we've had an opportunity to hear from the two speakers who will follow you. Dr. Redfern, now in Washington, formerly in Cincinnati, will tell us about his personnel experiences in the selection of teachers in Cincinnati.

George Redfern: Thank you, Dr. Klein. Members of the panel and colleagues of the conference. May I say, at the outset, that even though I am now associated with the American Association of School Administrators, I am still interested in and will be working with large city problems. I am certain that one of the prime large city problems is likely to continue to be that of teacher selection. The only difference in my present situation is that I'm not obliged to worry about meeting that September teacher employment deadline when school opens. I can also look at the teacher selection problem from a somewhat more academic point of view.

I represent a group of cities, not as large as Los Angeles, for which I'm thankful, which neither use written examinations nor have the services of boards of examiners. Cincinnati, I believe, may be typical of these cities. Some of the following conditions characterize their selection procedures.

1. Selection is basically a preliminary screening process,
2. In Cincinnati, the establishment of eligibility scores and rankings are frequently required, and
3. Appointment is made from eligibility scores or rankings. Candidates having the highest scores or rankings are given priority.

In Cincinnati, as my position paper shows, there are four eligibility groupings and candidates in the highest grouping must be appointed prior to those in the next highest grouping.

Not all cities, in the category I'm considering, are obliged to compute eligibility scores for candidates for selection purposes. In Cincinnati, however, it has been a requirement since the depression days before World War II. Even with the advent of the severe teacher shortage in the last twenty years, the Board of Education has not seen fit to remove or alter the basic selection requirements even though some relaxation has been permitted in accepting candidates with lower scores than normally would be permitted.

Still the chief objective is to select from among. Normally, the Cincinnati school system processes from 1500 to 1800 applications annually. The number of vacancies will total about 600 a year (500 for the September opening of school and 100 during the school year). Thus about one-third are employed and two-thirds rejected through the selection procedures used.

The three selection factors used are: academic record, professional references, and oral interview. It would be foolish for me to claim that these three factors are valid and precise enough to assure that all teachers employed are of the highest possible quality.

Academic record is judged by analyzing the transcript of credits with particular emphasis upon the student teaching record. The grade point average is used as the significant measure of academic proficiency.

Professional references (usually five in number) are used as the second selection criterion. Recognizing the unreliability of general recommendations, the references are required on forms provided by the school system so that they can be scored. This permits better comparisons among candidates. Care is exercised to make sure that references are provided by those who have had direct supervisory contact with the applicant and presumably are in a position to make relevant judgments as to the competency of the candidate.

The third selection criterion is the oral interview. Normally, it is a group interview and conducted wherever possible at Board of Education headquarters. A gratifying number of applicants are able to come to Cincinnati for the oral interview even though expense money cannot be provided. About 50 per cent of all people employed come from outside Ohio, which represents a considerable load of interviews. Most of these out-of-town candidates are interviewed on Saturday by interviewing teams organized by the personnel division.

The three selection criteria are weighted. Academic record counts 30 per cent; professional references, 20 per cent; and the oral interview, 50 per cent.

As I understand it, my position paper has not been put in your hands, but I'm going to risk over-simplification rather than bore you by reading the paper which gives more detail regarding the Cincinnati selection process.

The selection procedures used in Cincinnati are not unique--they aren't unusual. However, I'd like to make some observations about the type of teacher selection which they represent.

1. Selection has to be made within a framework of reality. As Dr. Brown has said, that reality is severe in large cities. So it is in Cincinnati where we have only a fraction of the demand that Los Angeles has.

2. Another reality is the negative image of teaching in the large cities. Despite persistent effort to change that image in the minds of candidates, they still find suburban schools more attractive. In Cincinnati, for example, the suburban schools can and do attract over half of all the graduates of the University of Cincinnati. Formerly, more than two-thirds of its graduates were employed in the Cincinnati Public Schools.

3. Even though universities in or near large cities may assign students to do their student teaching in the inner-city schools, this does not guarantee that the graduate will seek employment in the city. Our experience in Cincinnati confirms this observation.

4. Another reality is the matter of high demand and low supply especially in critical teaching areas. You know the familiar ones.

5. A fifth reality is the lack of good position specifications which are needed in recruitment and especially in placement. This

is a problem within the capacity of the school system to correct, however. There may be many specifications which each vacancy requires. If principals fail to specify these requirements, recruitment and selection is made more difficult.

6. Another very significant reality is the wish of the candidate to know where his placement will be at the time of employment. Most large cities have not found an effective way to assure a specific placement at time of employment, especially during the spring recruitment season. This is a handicap of serious proportions in large city teacher selection.

7. An additional reality is that there are two general classifications of applicant. One is the interim teacher; the other, the career teacher. The former has short range interests; the latter, a career expectancy. Much that has been said this morning by our business and industry panelists has been more relevant for the career than the interim teacher.

8. An eighth reality concerns money. In Cincinnati, we have a salary policy that attempts to keep teacher salaries competitive. Salaries are fixed at the 75th percentile of the 41 largest cities. While this would seem to establish a favorable competitive position, it cannot overcome the many advantages--monetary and non-monetary--which competitive suburban communities possess.

9. A final reality is the rather unique requirement that employment in school systems peaks sharply at one time during the year; namely, in September with the opening of school. Many other professions are able to smoothe out their employment needs. My contention is that since all school systems have this peak September employment problem, more mistakes are made in teacher selection than if employment needs could be more equally distributed throughout the school year.

In the time that remains, I wish to make some more observations about the non-examination type of selection procedures. After listening to Dr. Mitzel and Dr. Medley, I admit that I don't feel very comfortable about the adequacy of the Cincinnati teacher selection criteria. Admitting the weaknesses of the criteria, I can only say that we are obliged to live with them for the present at least.

I am convinced, however, that the criteria can be refined and should be. The following steps may be useful in this refinement process:

1. Better position requirements must be prepared by principals describing the expectations of the inner-city teacher. With a

clearer understanding of what is expected of the teacher, selection may be made more effective.

2. Each selection criterion should be carefully evaluated. An attempt might be made to correlate each with a success criterion which possibly could be ascertained from the appraisal records of the teacher during the probationary period. If the selection criterion correlates favorably with the teaching success criterion, a greater degree of confidence can be manifested in its effectiveness.

3. Professional references might be "field tested" by a sampling process. For example, a random sample of written references might be verified by telephone calls to the individuals who made the references. The purpose would be to see if a conversation would yield additional or different information than was indicated on the original reference form.

4. The oral interview could be scrutinized. Types of interviews might be compared, i.e., variations might be made in the composition of interviewing teams to see if one combination appeared more effective than another.

5. The priority given the various eligibility groups might be checked for validity. For example, scores achieved in the highest priority grouping might be correlated with the teaching success criterion achieved during the probationary period. It might well be established that high priority group candidates do not consistently turn out to be high teaching success teachers. If, on the other hand, they do, it would tend to verify the logic of appointing first from the top eligibility group rather than the next highest group.

There are probably other ways to evaluate the selection criteria. The point is that refinements probably can and should be made in the procedures.

In conclusion, I sincerely hope that this conference may advance the cause of better selection of teachers for the large cities. We need better ways to exchange and disseminate information. We need more dialogue between school personnel administrators and members of boards of examiners. We likewise should have closer contacts with those, at the university level, who are preparing teachers. We need the help of those in the universities who have expertise in research design who can assist school personnel people and board of examiners personnel do a more effective job of evaluating selection techniques.

I hope that out of this conference may come a better mechanism for exchange and dissemination of teacher selection data and information. I also hope that if the American Association of

School Administrators, as an organization, can be useful in helping large city personnel administrators fulfill their roles better that it may have the opportunity of doing so. Thank you very much.

Arthur Klein: Our third speaker, Dr. Albert Schiff of Detroit.

Albert Schiff: Mr. Chairman, colleagues - no city school system, worth its salt, wants to lower teacher standards, but the needs of the community are immediate problems and cannot wait for long range plans. Teacher selection has always been a calculated risk, but we can minimize this risk so that even the probationary period of which we've spoken in some of our sessions is a period of strengthening the teacher and not another screening device. We all know too well the incalculable harm an incompetent primary teacher can do during his first year of teaching to a group of youngsters just learning to read. This is unforgivable.

It has been ten years since I've entered the personnel field. About 600 to 700 new teachers were all that the city of Detroit needed to meet its needs in 1956. We now search for 2000 teachers every year, to help meet the needs of the growing community, to lower pupil-teacher ratio, to keep both the Federal programs as well as our local school programs operating and to offer all the other services that we've always said we needed. Even with funds available, we are short of personnel, and 2000 teachers are getting rougher and rougher to find.

What we have to do - what we must do - is re-examine the supply lines of teachers. Present training facilities are numerically and qualitatively inadequate to meet the needs of education today. They must be reorganized, they must be reformed, they must be augmented by new types of programs, and in many cases new types of institutions. We must make a nation-wide analysis of teacher training and the utilization of teachers, so that every level of education, elementary, secondary and college, can be assured of a steady flow of high quality instructors. This is the crux of the problem that big city schools face.

For the most part, large city school systems have set up screening devices and techniques to weed out the less qualified and the less desirable teacher candidates who have already been graduated from teacher training institutions. Boards of Examiners and other personnel officials, and Detroit is included, set up programs of testing and interviewing and examination of credentials, at great expenditure of funds (I just heard yesterday that the Board of Examiners in New York spends $1,500,000 on this) to insure that their school systems do not employ teachers who can give less than quality education to their students. This is deplorable especially at a time when staffs of this nature could be devoting their time and their energy in working out newer and better ways of selecting teachers for the present and for the future. No profession has such a rate of turnover and mortality as the teaching profession. It thus becomes apparent to many of us that we have to find the techniques of selection that will identify the candidate who has a commitment to teaching and will subsequently remain in the field for a lifetime career.

Selection procedures as they pertain to personnel administrators begin with the college senior and, although our selection procedures in Detroit are perhaps as adequate as most large city school systems, I question the continuing need for teacher selection by personnel administrators of school systems when the selective process for future teachers should begin much earlier than the college student who is approaching graduation. In Detroit we're often hurled this challenge, "Why can't we compete with the suburbs in terms of quality education, class size, salary, etc.?" Let's not fool ourselves--the sooner we face this problem realistically and indicate to all concerned that large city school systems, such as Detroit, New York, Chicago, and others are not suburban areas, that our teachers must reflect the ideals and the characteristics which are necessary for effective teaching in a large industrial and cosmopolitan city. Then and only then, can we come to grips with certain basic procedures to be followed in the selection of teachers for the future.

In Detroit, over the past few years, the Personnel Division has sponsored clubs for future teachers, and I don't want to minimize this. In 1957 at the beginning of our efforts, we had 12 high school clubs serving 300 members. We now have almost 5000 pupils participating in the 161 school units. An average of 25 to 30 members is the usual size of these groups, although some clubs range as few, at the last count, from 8 members in one school to 130 in another. Even in our society, as mobile as it is in terms of changes teachers may make during their lifetime, the greatest source of future teachers for any large city rests with the high school students in the classrooms of that city. I hate to use an old cliche, but it's so true, that the "teachers of tomorrow are in our high schools today," and if you go too far away in recruiting teachers - at least we find this to be true - the less chance we have to get teachers to come to Detroit.

There's not much solace in finding that school systems are competing for the pitifully few highly qualified, competent teachers available. I am also weary of these wonderful, beautiful recruitment brochures of how to attract teachers to our respective communities. These techniques may be very well for business, but I often wonder if it is desirable for educators.

The selection of prospective teachers should be continued through the college and university level, beginning at the freshman year. School systems should provide a co-ordinator to work with teacher training colleges in their areas. The aim should be to help the prospective teacher and suggest shortage areas. Isn't it a paradox that we still have a surplus of social studies teachers and because of that surplus we're having them teach math and other areas in which we have critical shortages? Let us provide child study opportunities through classroom visitations, teacher conferences, get them jobs as camp counselors, secure employment in year-round youth groups, aid them in materials for class papers. In brief, we have to extend the services provided by teacher education and education research divisions to the end that greater cooperation can be achieved between the school system and the teacher training institution. Bill Brown, George Redfern, and I all agree that this close cooperation with teacher training institutions is important and imperative, and the internship program can be an extraordinarily successful training device leading to a real functional partnership between teacher education institutions and public school systems. Let's look favorably upon the use of Federal funds to help us in a search for quality teachers for the future. Dr. Brownell, former Superintendent of Schools in Detroit, who is attending this conference, gave us permission to modify our teacher standards last year. We had an experimental group of seventy candidates enroll at Wayne State University who were post-degree candidates with little or no college credit in education. They worked with people out in the field under careful supervision and along with staff of the teacher training institution. We still have over forty of these people enrolled now and this is their second semester. While this may appear to be a small number, we've gained forty teachers by means which proved successful. There must be other programs that are equally valuable.

Special needs of a metropolitan area, and this of course I do not need to call to your attention, demand racially integrated school staffs and training of prospective teachers to meet the needs of deprived or disadvantaged youth. We do call upon teacher training institutions not to recommend candidates for teaching about whom there are any questions of general intelligence or competence, personality, or other factors which preclude success in teaching. School personnel administrators have a right to assume that these candidates are ready to "tackle" the rigors of the classroom if they have been or are given the aid of adequate supervisory and administrative staff. I believe large city school systems will need to modify rigid teacher recruitment and selection procedures to alleviate the teacher shortage by adoption of temporary stop gap measures while still attacking the problem of effective long range problems.

Dr. Brownell laid the groundwork this past year for working out plans with the teacher training institution in our area.

Five Task Forces are at work at the present time. Task Force I is devoting its time to the development of teacher internship programs for undergraduates and post-degree students--and the development of specially designed post-degree and/or M.A.T. programs in teacher education (campus and off-campus). Task Force II is working in the area of expansion and modification of current programs for the preparation of teachers for inner-city schools. Task Force III is working in the development of specially designed programs for the preparation of teacher assistants and para-professional aides (campus and off-campus). Task Force IV is currently developing policies and procedures for the recruitment of undergraduate and post-degree students for teacher education. Task Force V is devoting its time to the organization of research teams for conducting follow-up studies, action research, evaluation and assessment of teacher education programs.

It is the plan of these Task Forces to have some recommendations in operation for the February, 1967, school semester.

Thank you very much.

Discussion

Arthur Klein: When I read the position papers that were submitted by the three gentlemen from whom you've just heard, I was delighted with the forthright and realistic approach that they had to the great problems confronting personnel administrators in the large cities. I was amused, of course, when I heard one of the speakers repeat the question that all of us are familiar with in the large cities: "Why can't you compete with the suburbs?" Well, of course, you people can't supply the answer in Cincinnati, for example, because you haven't an organized testing program. In New York City, the people who ask the question are always sure of the answer: "It's your darn examinations that keep them out."

I know that you have questions that you'd like to ask these gentlemen. One or two comments first. You may recall that Harry Rivlin pointed out the importance, which has been underscored by some of our speakers this afternoon, of the selection process that begins in the colleges. Then there is the examination proper by the selection agency and thereafter there is the probationary period. There is a continuing selection process over a period of years, but I was glad to hear Dr. Schiff voice very forcefully the thought that one can't subject children to untrained or undesirable teachers, merely because we can fall back on the probationary period for the elimination of those teachers. Dr. Rivlin left with Fred Williams a message to be read to us. Fred.

Fred Williams: Thank you Mr. Chairman. Dr. Rivlin apparently felt that out of the conversation he had last night there may have been some misinterpretations and wanted the opportunity to clarify his point. I wasn't present, so I'm not sure what the confusion was, but I'm sure this will be of benefit to all who are here. I'll read this as he gave it to me.

"The keepers of the gate are key people in any school system. I do not question the need for a selection procedure, but I hope we can find better ways of selection. I think research money will be invested better in improving our ways of evaluating performance on the job than by concentrating on the improvement of the examination procedures for determining entrants into the system. There must be selection for initial appointments, but this is only a screening test. Those who are passed should be 'accepted as promising risks' and should be evaluated during their period of probationary service before being granted tenure. Provision for evaluating prior experience is important for two reasons: one, previous experience may be a useful part of the screening process; and two, such evaluation can be part of a recruitment process.

"Why shouldn't the Board of Education raid other school systems by inviting unusually successful teachers and principals to join New York's school system? Can the Board of Examiners find the time and personnel resources to focus on the evaluation of performance, if it relieves itself of the time-consuming chore of conducting, administering, and rating written examinations by availing itself of such prefessional test agencies as E.T.S? How can we get good experienced teachers and principals from other school systems and yet be fair, objective and honest? For example, can we give the examinations privately to those who have been evaluated in their job in their own home settings? The Board of Examiners must continue to be the keeper of the gate, selecting impartially and honestly, regardless of race, creed or political power, but it also has a responsibility for evaluating those who get through the first set of gates."

Arthur Klein: And now questions addressed to our three speakers.

Ralph Walter: Dr. Schiff stressed the need for the colleges to cooperate with the city school systems. As far as the experience of the students is concerned, I think there is another side to that coin. We've just gone through this experience: in junior year, we have 1000 juniors who go out and spend part of their time in city schools and part of their time in suburban schools. We found great cooperation in the suburban schools, but we could not place our youngsters in the city schools. Two of the largest cities in the state turned us down on this, and I think if something could be done to induce them to accept, it would be helpful.

Albert Schiff: Someone here said that's hard to believe. I don't think that that's going to happen in New York City, and Dr. Lang has just said he'll take them in New York. So you tell the benighted people in New Jersey that the Hudson River is fordable.

Jules Kolodny: I'd like to direct this question to Dr. Brown. You referred to visits being made in-state to several hundred colleges, and out-of-state as well, to several hundred colleges. You've talked of visits to Hawaii; you've talked of visits in connection with the Army schools, returnees, recruitment among the baccalaureate graduates who were in other professions, etc. May I ask these two questions: how many people are assigned to this task; and what is the size of the budget appropriation?

William Brown: In answer to your question, there are two forces involved. There is a force of about 15 professional recruiters who work year-round. In addition to that, many school principals are relieved of their assignments for one, two, three, or four weeks depending upon the length of the trip. Supervisors from the operating divisions are used. So, the Personnel Division budget for recruitment would include the salaries of the 15 regular staff members with an average salary of approximately $15,000, and the salaries of the principals and the supervisors. Wayland (Baldwin), you estimated once how much it cost the district to use the school personnel. What would that come to?

Wayland Baldwin: I don't have those figures at the present time. In our whole selection procedure, including examination committees where we make generous use of our school principals, supervisors, vice principals, and teachers, and also in the recruitment effort, we use about a thousand people a year. I would estimate that this would average about three or four days for each one, on the average. This is a district-wide enterprise and runs into several hundred thousand dollars, but I can't give you any exact figures.

Charles Cogen: I would like to make three comments. Two of them are more or less of a negative nature, one of a positive nature.

A good deal has been said, and I think there have been some fine suggestions submitted by these speakers, about the role of the teachers' college and cooperating with the school systems and so on. Now I think one consideration that we have to bear in mind is the inadequacy of many teachers' colleges. We hear an awful lot about, and we see--I've seen in my experience--students who come into the classroom who had never heard of a lesson plan and other realistic things in our teaching which are a little foreign to the subject matter of many faculties of teachers' colleges who teach much, much too theoretically.

Secondly, another negative factor is that we have to be concerned about the supervisors in this whole role of teacher evaluation and screening. Now this has hardly been mentioned at all in any of the discussion that we've had up to this time; namely, the fact that supervisors frequently are very incompetent to do the job of assisting the teacher or may have personalities that react unfavorably or have a laissez-faire attitude. There are all kinds of attitudes on the parts of supervisors which militate against plowing in to the teacher that which is needed to bring forth a good product, and this is something that I think bears very much consideration. How do you take account of that in comparing one candidate with another when they've had different kinds of supervision?

Finally, a more positive note: the question has recurred over and over again, not only at this session but at other sessions, of the problem of the inner-city and how we can recruit and retain teachers for these difficult schools. This is probably one of the crucial problems of the day in education. I think, in that connection, we ought to mention--and I don't see how we can avoid mentioning--the fact that we need to pour tremendous resources into the schools in order to make the job attractive to the teachers and to hold them. In that connection I want to refer only briefly to the More Effective Schools program in New York City. I have visited a couple of them and I have seen them firsthand, and I've heard much more about them second- and third-hand. I won't go into detail since I think most of you are familiar with the situation there--the saturation of services, and so on. I understand that Los Angeles sent an investigator to New York City to see what is happening in the "more effective schools" and came back with extremely glowing reports, and said that this is the thing that will solve our disadvantaged school problem; and yet, to my knowledge, Los Angeles has not introduced that program.

Theodore Lang: I haven't had the privilege of sitting with you this morning and yesterday evening, so I do not have the benefit of your earlier discussions. It is good to be with you. It is also comforting to know that other large metropolitan areas have problems almost identical to ours. As each of you spoke this afternoon, those of us from New York nodded our heads in agreement. In the spirit of learning, I have questions to direct to a number of the panelists who spoke here today.

But, before I ask those questions I would like to recommend, because no one spoke of it, the technique of manpower projection to determine personnel needs for September at an early enough date so that there can be better preparation than is the case when a school system first knows of its critical shortage in August. We made such September 1966 projections last February. As a result, we were able to anticipate a teacher shortage of approximately 2,000. (This deficit stems from the same factors that account for your shortages, primarily, the availability of Federal and state funds for expanding compensatory education.) Thereupon, we trained approximately 2,000 college graduates during the summer by enlisting the assistance of one of our best teacher training colleges and conducting an intensive teacher training program. The program extended from six to seven weeks, giving the participants, who had no previous pedagogic preparation, six or eight credits of professional background for secondary school and elementary school, respectively, so that they could be brought into our system as teachers in September. Of course, they were not adequately trained even with that degree of preparation. However, it is a much better approach than first recognizing your problem in August or September, and then having to recruit and place in the classroom baccalaureate degree holders without any professional grounding. So, I would strongly urge you to develop the technique of projecting your manpower needs to determine the probable shortages. This should be simpler in your systems than in our organization because we have a huge group of substitute teachers (about 30 per cent of the total) and our method of assigning these substitutes, in distinction to the appointment procedure that applies to regular teachers, is such that we are not able to compile accurate data on the inflow and outgo of substitutes.

Now, on the specific questions, in order to better understand each of your presentations - To Dr. Brown: I would be interested in knowing, of all the contracts that you make with teachers, what percentage result from contract offers made at campus interviews? And my second question to you concerns the anticipated failure rate: What is the proportion of teachers who fail your formal examination after having completed one year of initial teaching with satisfactory performance?

William Brown: Before I answer your question, I would like to underscore the importance of manpower projections. We feel, from a recruitment standpoint, that if we cannot project well ahead, we cannot do the best recruitment job. Also, we have a serious forecasting difficulty at the present time because we do not know for certain that a new State Law in California will be in operation in our district for February. This law would increase our needs by 350 additional elementary teachers. There are some serious obstacles in applying to the State Board of Education and meeting the provisions of the law. I concur strongly in the importance of projecting ahead insofar as that's feasible.

Theodore Lang: The second question was expected failure - of those who have the one year of initial teaching experience, who take your formal examination, but limiting it to those who had satisfactory performance reports, what percentage fail?

William Brown: Those who were strong or outstanding?

Theodore Lang: No, those who were satisfactory.

William Brown: Approximately 15 per cent, Dr. Lang, would be about as close as I could come on that.

Theodore Lang: Thank you. The question I have for Dr. Redfern is on the oral interviews: You say that approximately 50 per cent take the oral interviews. What happens to those who cannot come in to headquarters for the interview, which is a weighted part of your examination?

George Redfern: The campus interviews, in practically all instances, are made by a team and the oral interview then is conducted on the campus by the team. Now, I would say that about 85 per cent of the people at the campus level, would have a two-team interview, but there are some instances of only one interview.

Theodore Lang: Do you make many contract offers at the campus?

George Redfern: We make no contract offers at campus, even though we need them badly. We will not give anybody a contract at the time of the interview, until he processes the application.

Theodore Lang: The question to Dr. Schiff: Dr. Schiff, one of our serious problems is the nature of the initial assignment of the teacher. I know it varies from school to school in New York depending upon the principal. However, we hear many stories in Headquarters of beginning, inexperienced teachers, including those who took our summer intensive preparation program, who were given the toughest class in the school for their first-year assignment--the kind of class that even an experienced teacher has difficulty in handling. How do you control such initial assignments in your system?

Albert Schiff: I'd be glad to answer the question as best I can, but I did suggest to the chairman that there may be some specific problem areas that I think would mainly affect New York, Chicago, Philadelphia, etc., that we may want to discuss in a smaller group session.

Basically, the policy of the Superintendent and the Board of Education, was to try insofar as possible to alternately place in a school where vacancies exist a beginning teacher and an experienced teacher. Now in reality, of course, you have a system of voluntary and involuntary transfers. We have a policy known as a career transfer. At the end of the three-year probationary period, every teacher is subject to transfer in the Detroit schools. We also give a teacher at the end of the third year a higher salary increment instead of the normal salary increment.

Theodore Lang: I can clarify the question. I think the problem is not so much the school of assignment as the *class* within the school to which the new teacher is assigned. I feel that there are many good classes in disadvantaged areas which a beginning teacher could handle adequately and there are very bad classes in privileged neighborhoods, with which a beginning teacher would have difficulty. It is the character of the initial assignment which I am interested in learning to control because principals will take the experienced teacher and gradually move him to the better classes, with the residual problem classes being left for the beginning teacher.

Arthur Klein: I'd like to turn the meeting back to the chairman, but I've been urgently requested by these two gentlemen to try to arrange with Mr. Denn's approval a rescheduling of a discussion period between 8:30 and 9:30 tonight in this room of representatives of the large city school systems to discuss greater coordination and more study in depth of the problems that confront the large city.

Session No. 5: Criteria: Problems in Validating Teacher Selection Policies and Procedures

Chairman: Paul Denn, Board of Examiners

David G. Ryans, University of Hawaii
Donald Medley, Educational Testing Service
Harold Mitzel, Pennsylvania State University

Paul Denn: Most of us are in agreement that we must make some professional attempt to select, in an objective and valid way, those whom we want to teach our children. I think when we go off into a discussion of projected needs of personnel, inner- and outer-city rivalry, teacher shortages and so on, we tend to forget that the individual teacher, into whose classroom we're going to send our own child, is the one to whom we are entrusting the fate of that child. The fact that there are enormous problems to be encountered when we embark on such selection does not detract from our obligation to make the effort. The problems may be complex and difficult but I, for one, believe that they are not insuperable. Like a second-place transportation agency, we must try harder. One major key, I believe, lies in research, in depth, more intensive research and, perhaps, more scientific research, to establish valid criteria for selection and to develop the instruments that are needed.

We are fortunate in having three research men who have been working very extensively in this field. I'd like to introduce them and have them present their views in turn now. First, I'd like to introduce someone who is known, I believe, as the Dean of Educational Research. He was president of the American Educational Research Association. He's the author of a standard work on characteristics of teachers and, at present, he's the Director of the Educational Research Center of the University of Hawaii, a most desirable place to be. Dr. David Ryans.

David Ryans: Coming before you following the most gracious and flatteringly generous introduction, and knowing full well I do not live up to my billing, I feel very humble--and also very reluctant to open my mouth at all. I should have stayed back at my place in the audience and rested on the laurels so kindly bestowed.

There are other reasons for my feeling somewhat reluctant to pursue the topic around which I built the position paper submitted to those responsible for our meeting. One reason is that I fear what I may have to say will sound rather academic to some of you; and most of us think presentations of that sort are likely to be much more abstract than practical. I hope my remarks can be completely sound, but I also hope they can be accepted as practical in nature. To me, what I have intended to talk about does not seem academic; I sincerely hope it will not appear so to you. For I do indeed agree with those of you who have pointed out that in the public schools we must operate in a context of reality. But, as has been amply demonstrated by some of the persons participating in this meeting, sound research *can* be accomplished in the public school real world; we can operate in the context of reality and still specify teaching criteria, develop procedures for predicting those criteria, and test those predictors against our agreed-upon criteria.

Someone once said Josiah Royce followed a procedure in lecturing in which he first told his listeners what he was going to say, then told them what he had to say, and finally told them what he had said. I will not be as brash as to try to emulate Josiah Royce, even to the extent of patterning my outline after his formula. But I would like to begin (particularly since you do not have copies of my prepared paper) by giving an overview of what I want to say and what I tried to cover in my prepared paper. I want to say a few words about what we mean when we talk about criteria and the criterion problem--and why it is important for teacher selection; and I want to say something about teacher selection as I think it *should* be planned in light of agreed-upon criteria; and I had intended to talk briefly about some of the problems we face in trying to designate criteria and obtain estimates of criteria. (Note that I am not talking about teacher selection procedures, as such, at the moment, but about the criterion problem and estimates of criteria of teaching against which we may judge the extent to which teacher selection procedures are working.) My major position will be one I have taken a number of times in discussions of this sort--that the criterion problem is at the same time the most important and the most neglected of the problems of teacher selection. This is true, I think, whether we are concerned with content validity, or predictive validity, or whatever approach we take to the problem of validation.

I am going to read my prepared paper in part, inserting comments occasionally, and skipping about quite freely. I hope the excerpts will not have too much discontinuity.

A good deal of confusion appears to exist with regard to just what we mean when the term criterion, or criteria, is employed.

A criterion is simply a standard or bench-mark used to provide a frame of reference for judging or evaluating something. It may be thought of as a model against which comparisons may be made. Usually criteria evolve from common agreement about acceptable standards--regulatory boards for insurance, public utilities, banking, contracting, and such operate with a set of agreed-upon standards (criteria) as a model. In many circumstances (I think I should say in all circumstances) criteria are arbitrary and relative to values that are held to be important by some particular group of persons at hope it will not appear so to you. For I do indeed agree with those of you who have pointed out that in the public schools we must operate in a context of reality. But, as has been amply demonstrated by some of the persons participating in this meeting, sound research can be accomplished in the public school real world; we can operate in the context of reality and still specify teaching criteria, develop procedures for predicting those criteria, and test those predictors against our agreed-upon criteria.

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Now in relation to teacher selection, just as preferences and opinions (values) of individuals vary with regard to the competencies and behaviors expected of teachers, so the criteria against which teacher selection procedures should be compared will often vary (at least in certain features) from community to community; and validity studies of teacher selection nearly always require replication adapted to the varying conditions.

In taking this position that criteria are determined by value contexts that differ among schools and communities, I am implying that the first step in the consideration of criteria against which to judge a teacher selection program must be to determine the expectations that are held locally with regard to teaching and teacher behavior. The extent to which there may be concensus about major issues, the greater the assurance with which a school administration or its educational researchers may approach the designation of criteria and their components, and the greater the possibility of conducting meaningful validity studies of teacher selection procedures.

I shall return to the relationship between criteria and value systems later, but I first would like to comment further on the nature of criteria--and the frequent neglect of, and confusions about, considerations relating to criteria.

Here I do not restrict my remarks to studies of teacher selection and research on teacher behavior; they are no more vulnerable than a great deal of research in the behavioral sciences where the problem of the dependent variable, or the criterion, has been neglected. From years of reading research reports and research proposals, I conclude that many otherwise elegantly designed researches--well designed from the standpoint of sampling, control of the experimental variable and other independent variables, data analysis (and often involving real ingenuity of approach)--have, almost as an after-thought it seems, settled upon some available instrument, or perhaps hastily thrown together some test, inventory, or other observational technique without great regard to its validity and reliability--proceeding on the assumption that such an instrument satisfactorily reflected, and provided useful estimates of, the criterion behavior. (A friend of mine sometimes refers to this sort of thing as the "law of the instrument" and points out it is applicable in many of our activities. He illustrates his "law of the instrument" by saying if you give a baby a hammer, the baby will find something to hit with it; or, as it might be applied to the personnel field, if we have an available test or instrument of some sort, we will find some place to use it--often without regard to what the purpose of our work may be.) This happens to be a pet peeve of mine--the fact that so many investigators seem to neglect or give too little attention to control of the dependent variable (criterion behavior) and that instead of considering this important problem from the very beginning of their research, they appear to give it only cursory attention some time later in the investigation.

I must move along. The second part of my paper had to do with a rather vague section titled, "Teacher Selection in Perspective." In this section what I tried to do was to take the problem of the curriculum developer and think of the procedures we usually approve in carefully carried out curriculum development. I then tried to look at teacher selection research within the same general context of developing procedures to conform to certain objectives, followed by evaluating the procedures against estimates of the attainment of the selected objectives. Just as the curriculum constructor properly first sets up objectives, then spells out those objectives operationally, then develops the curriculum materials, and then evaluates the curriculum materials against the operationally defined objectives, it seems to me the logical process for teacher selection personnel is to set up the criteria of teaching, spell out those criteria objectively in terms of teacher behaviors, develop predictor procedures that are hypothesized to be related to the criterion behaviors, and finally evaluate the predictor materials against the criteria. In my paper I try to spell out in some ten steps the operations one might appropriately employ. These include:

(1) Selection and designation of general aspects of the value system framework of the school/community as they relate to teacher behavior. I am referring here to the agreed-upon qualities that are desired, or expected, of teachers in a particular place and in particular kinds of teaching situations. (Note again that this process of arriving at criteria necessarily is subjective and a matter of the values individuals or groups of individuals may possess in common. When we designate criteria we proceed from a context of an accepted value system. We view teacher behavior in light of a set of attitudes, opinions, and viewpoints that reflect the sorts of teacher behavior we approve and prefer and also the kinds of behavior we disapprove and find unacceptable. To the extent any group of persons share in common certain expectancies, preferences, or biases about teachers and teaching, criteria of teacher behavior may be defined for that particular group.)

(2) Identification of observable properties of teacher classroom behavior that may be related to the specified operationally described criteria (i.e., the descriptive cataloging of teacher characteristics and behaviors that occur in the classroom).

(3) Identification of kinds of situations in which the agreed-upon "valued teachers behaviors" may occur--and in which they may be observed and assessed.

(4) Operational description (i.e., description in terms of actual teacher behaviors) of the agreed-upon valued behaviors that are to comprise the criteria of teacher behavior.

(5) Selection of methods of estimating the operationally (i.e., behaviorally) described valued behaviors. This is the problem of instrumentation relative to the criterion behavior and obtaining assessments of the criterion behaviors. In assessing some aspect or characteristic of the criterion behavior of teachers we are trying to estimate the extent to which that defined characteristic is manifest by some teacher.

(6) Development of selection instruments and procedures that are hypothesized to yield estimates that will reflect the operationally described teacher behaviors (criterion behaviors)--which, in turn, are assumed to reflect the value framework of the school and the community served.

(7) Assembly of data yielded by the teacher selection instruments and procedures noted in Step 6 above.

(8) Assembly of data yielded by the procedures used to estimate the criterion behaviors--Step 4 above.

(9) Analysis of relationships between estimates of the behaviorally defined criterion behavior and the estimates of teacher characteristics used in the teacher selection procedure.

(10) Evaluation of the teacher selection procedures by the drawing of inferences about the validity of those procedures for predicting the criterion behaviors designated in Steps 1 through 3 above.

The next section of my paper deals with "Common Confusions in Dealing with Aspects of the Criterion Problem." I think I shall skip most of this, but I do want to mention the importance (even though it may seem academic) of distinguishing between criteria and "estimates of criteria." I used two specific examples in my paper to try to illustrate the distinction, one relating to "classroom management" and the other to "communication of knowledge." In the case of "communication of content" I suggested a few of many criterion behaviors that might be designated (e.g., clarity of presentation, subject matter depth, etc.), all of these having to do with definition of sub-behaviors involved in the behavior we might call "classroom communication." In light of the criterion behaviors thus designated, I then suggested several different ways we might go about estimating such teacher behaviors--estimating the criteria to get the benchmarks against which we might judge our teacher selection procedures if we chose. Thus, we might employ observation procedures to rate samples of teacher communication behaviors or we might make frequency counts; or instead of resorting to a sample of the criterion behavior of the teacher per se, we might choose to view the criterion in terms of known or assumed correlates of "teacher communication of knowledge" revealed from measurements of the pupils.

The next section of my paper dealt with "Some Considerations in the Designation and Estimation of Criteria," and in this discussion I was primarily concerned with the need for trying to avoid bias (i.e., criterion bias) that frequently affects both the definition of criteria and also the development of measures or measuring instruments that yield estimates of the criteria. I will not dwell on this, but I think we should remember at least two very important sources of criterion bias, one having to do with the exclusiveness of our criteria (and the estimates we later develop to reflect those criteria) and the inclusiveness of our criteria and criterion estimates. We do not want to include anything in our definition or estimation procedure that is not really a part of teaching behavior (that may contaminate our thinking), nor do we want to exclude anything that is really a part of teaching behavior. We could give many examples of criterion bias with respect to teacher selection procedures.

In subsequent sections of my paper I commented briefly upon approaches to criterion definition and also approaches to obtaining criterion data.

May I remind you again that I have been talking almost entirely about the designation of criteria and of the development of estimates of criterion behavior in teaching--not about teacher selection procedures. I have pointed out that ideally this should precede the development and/or choice of teacher selection procedures and devices and that such teacher selection procedures as might be adopted would be ones presumably geared to the criteria. And in the ten-step paradigm it was not until steps 7, 8, 9, and 10 that we got along with research directed at determining whether or not our selection procedures appeared to be doing what they were intended to do.

In practice this is not likely to be the way things work out. Very often we decide upon certain teacher selection instruments or procedures with only a vague idea of what criteria we are concerned with. To be sure the selection of devices has often been accomplished on the basis of considerable experience and wisdom growing out of experience. But it is after the use of the instruments that we finally begin to wonder whether by chance they may be measuring the criteria we find acceptable in the community and school system. So, very often we enter my paradigm at about step 6 and then go back and retroactively try to think, "Well now, what was it we really wanted to be getting at with these devices?" Perhaps this is justified, or at least it is what we have to do in our "context of reality," but some place along the line, even if it is done in retrospect, we need to try to designate exactly what it is that we expect of teachers and that we hope our predictors may predict.

As I come to the conclusion of my remarks, I feel a strong sense of inadequacy. I know I have gone over this much too hurriedly, and I wish we could sit down for several days just to talk about how in a particular school system we might go about outlining a study which would start with the designation of criteria and involve the matching of predictor data provided by teacher selection procedures against operationally defined criterion behaviors of teachers approved in the particular community. Perhaps some day we can do this.

May I read the last hundred words or so of my paper.

As is the case with most of you present, I have given a great deal of thought to the problem of the criterion, particularly as it relates to teacher behavior and to the problem of validity study of teacher selection devices. I find it easy to identify and recognize many of the problems and difficulties with which we are faced in trying to develop satisfactory descriptions of the criterion behavior of teachers and techniques which will yield valid estimates of the criterion behavior involved in teaching. I recognize the sources of bias in the description of criterion behavior and the conditions making for invalidity of the estimates yielded by different methods of assessing criterion behavior. But I am admittedly frustrated by the difficulties involved in obtaining criterion data which are, on one hand, *inclusive and complete* and, on the other, *exclusive and free of contamination*. I know it is not easy to lick these problems, particularly when we must frequently conduct validity studies in situations where we have been using certain teacher selection devices that were selected on an a priori basis without the benefit of guidance of adequate criterion descriptions, and now, after the fact, we are faced with the problem of providing procedures that will yield estimates of criterion descriptions against which to test our selection data. I do not think the situation is an impossible one, but I cannot help but recognize, as I think most of us must, that we are faced with practical considerations which force us to compromise and employ make-shift methods that preclude the carrying out of validity studies of the quality we would like.

Paul Denn: The next two panelists are not unfamiliar with the problems of education in large cities. They both were with the Board of Higher Education in New York City for a period of time. Donald Medley, who is the next panelist, is now head of the Teacher Behavior Research Group of the Educational Testing Service in Princeton.

Donald Medley (raising microphone a few inches): The discussion is going to go on at a little higher level from now on--in one sense, anyhow. I don't know whether I like to be here discussing problems which, as Paul has mentioned, Harold Mitzel and I have already spent several years on while we were doing research in teaching in New York City. Maybe this is an admission that we left in defeat!

(Dr. Medley now read his position paper which is reproduced on page 95.)

As I've been sitting here, I've been thinking that this proposal is couched in terms of the present structure of a teacher's career where a teacher goes to school so many years and then the training stops and she teaches so many years. Apparently, the theory is that at some point a teacher becomes competent. If you can just get him to that point, then you have it made. I think if we thought of teaching and teaching competences as something that grows throughout the entire career, and if we thought of the selection problem as identifying steps, when a teacher has learned all that a college can teach him, let's take him into the school system, and when he has learned all that we can teach him in the school system, let's make up our mind whether we want to keep him or not. Now if I had my way, this distinction between what happens in a college and what happens in the school system wouldn't be nearly as clear-cut. Something like what Harry Rivlin suggested in his paper at the Great Cities Conference and what I think he's trying to implement at Fordham where the transition from an undergraduate pre-service training to in-service training performance is more or less much more gradual and it is much more individually tailored to the status of the individual. So in thinking about this proposal, don't throw it out because you think it won't work under the present system. After all, we're entitled to talk about what ought to be as well as what we think might be.

Paul Denn: The next panelist, Harold Mitzel, is Assistant Dean of Research at Pennsylvania State University.

Harold Mitzel: I'm reminded of the military convoy situation. You know, a military convoy travels at a constant rate of 35 miles per hour, at least that's what the convoy commander has set when he takes off in the lead jeep. But it always happens that the guy who's on the rear end of the convoy drives at a constant speed of 83 miles per hour just in order to keep up. So if I seem to be going 83 miles per hour, it's because I'm trying to catch up with this convoy. It's a pleasure to share another forum with Dave Ryans and Don Medley. I've had the joy of working with them in making presentations in the literature, and an appearance before a group like this is another interesting adventure for me. I think it is significant that we all prepared our papers independently, but some of the same threads or themes do run through them.

(Dr. Mitzel now read his position paper which is reproduced on page 99.)

Discussion

Paul Denn: Would you like to ask some questions, or make some comment? Who would like to begin?

Douglas Bray: I'd like to make a contentious comment. I feel a great contrast between the severe and immediate practical problems in places like Detroit, Los Angeles, and New York and the formalistic academic research suggested by this panel. These two worlds are just so far apart that very little progress will be made in solving problems of teacher selection if we insist on the kind of purity which has held back progress in this field for so many years. I really feel that something far more quickly workable is called for.

David Ryans: I don't think it's nearly as impractical as it sounds. No. I can really get kind of worked up about this because you know we talk about all of these practical problems that face us, and we forget about the fact that we can sample, as Harold was saying and as Don was saying here. We can get samples of teachers and we can work with them, and this doesn't mean that we have to do this with everybody. We can carry on a parallel process of, call it expediency if you will, so far as teacher selection is concerned, at least this is my contention and one of research which does have some foundation. You see, I could be contentious and say as long as you keep on doing things the way that you're doing now, you don't know what the dickens is happening and never will because you don't have any criteria to start with; you never have anything to test them against.

Douglas Bray: I heard someone, I think it was Harold Hunt, say that there are a lot of "izes" that the administrator has to use: supervise, organize, and finally, compromise - with the last of these perhaps being the most important. I think we can do some compromising and at the same time achieve a good part of our goal here.

Samuel Brownell: It seems to me that in our discussion of teacher selection we're not so far apart as what might be suggested. Obviously, we need instruments. We need various ways to know how to put the teacher in the best place. We don't always have the chance to do that in a school system, so we do need help in that.

If we are in a small school system, and I used to be a superintendent of a small school system (that was before I went to Detroit) and I knew that I had to fill a vacancy in a third grade in a particular school, the criteria of the kind of teacher needed could be pretty clear because I knew the administrator. I knew I had a stable situation.

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When we get to the matter of selecting people for a large city school system, I think we have to recognize the fact that what we're trying to do is to find people who can come into a school system, not a particular school. We're looking for people who are going to make a career, who can be placed in one school or another. In other words, we're looking for people who are flexible, who have the general basic qualifications, and then we can fit into many types of situations. Furthermore, we have to recognize the fact that people change. A teacher that we select today isn't the same as the teacher next year, nor ten years from now, nor twenty years from now. What we're trying to do in selecting teachers for a large school system is to find the people we ought to take into the large organization to work.

It seems to me that the emphasis on the selection process has to be to protect the children against those who are obviously incompetent, who haven't the characteristics that we can take the chance on. We're trying to do the same thing the life insurance doctor does--to get out the poorest risks. We may be wrong occasionally, just as they occasionally select poor risks. I'm just simply saying that I think if we take that into account, the fact that teachers are flexible and they do learn and they grow and they change--then we're not quite as far apart on this as it was suggested because we have two different kinds of things we're trying to do, and we need two different kinds of processing.

Paul Denn: Sometimes some of us want more than that when our own children are involved. Dr. Baldwin?

Wayland Baldwin: At one time I felt impatient when I listened to the "researchers." I wondered if it would ever be possible for researchers and practitioners to speak the same language. Some two years ago I attended a 5-day conference held in Tempe, Arizona. The topic for discussion was "Bridging the Gap Between Research and Practice." Before the five days had ended, researchers and practitioners were speaking the same language. I gained much from this conference. Particularly I was convinced that the research expert has much to offer to the personnel practitioner. It is important that we get together. It is not possible to bridge this gap in a 2-day conference. We need much more time. I should like to recommend a 6-week seminar for selected leaders in the field of educational research and school personnel administration.

Paul Denn: Well, we can make a start, and let's try to do that because it's most important for us. Dr. Darland, you had your hand up.

David Darland: I'm merely going to say that I think you are closer to the truch of where you ought to be in terms of what this meeting is about than any time since I've arrived, and I heard Dr. Bray very clearly support the idea of criteria. Well, where did they get the one, the criteria that you use--did you just reach out and pull it out of the air?

Jay Greene: I've a question, and I agree with Dave because I sense here some closeness, a question to the three people who just spoke. Aren't there different criteria and different instruments at different levels that should be perfected to achieve special purposes? For example, the first selection comes when a student is selected in the college to go into teacher training or teacher education. Now at that level there are criteria that may be different than the criteria that you want to describe later on. There should be criteria for putting them into this program and certain instruments that ought to be set up at that time for that purpose. If we did that, we would be measuring achievement, as Dr. Medley points out. Then the next step comes after he has graduated from this program and he wants to be a beginning teacher. Here you want some criteria related to the beginning teacher phase, and you want to try to perfect certain instruments limited only to the beginning teacher phase, because you can't measure the other aspects. Here again, you'd be measuring his achievement at that point which Dr. Medley says is more possible than getting into prediction.

In the third level, after he has taught for a year and had some teaching experience, you're down to the real job itself. Then you want to determine some different criteria and at that time perfect some instruments, perhaps the teaching test you talked about, which could be introduced perhaps for the first time. You can't use it earlier and here, too, you are measuring on that level--achievement rather than prediction--which may come in the total situation. My question is: "Is it possible that we can use some of the instruments that you would reject because they're not suitable for prediction but they are more suitable along the way and to develop different sets of criteria?"

Paul Denn: Harold, would you want to take that first because you had presented some steps in the process.

Donald Medley: I have a short answer, yes. It seems to me what Drs. Bray and Brownell say sort of hooked up in my mind. When Dr. Brownell talked about what we're really trying to do, we're trying to identify teachers who can go into a large city system and be assigned any place in the system and succeed there, be flexible. Flexibility has been added to all the things that Harold talks about and suggests. I think the gap here is really between the job we're trying to do and the tools we're trying to do it with. We're trying to pick this kind of super-teacher with some kind of a paper-and-pencil test.

I remember someone used to say to me, if you want to tell what a cowboy is going to do when he's drunk, find out what he did the last time he was drunk. And I think that we've just got to...if you want to attack this problem now, and you don't want to run away from it, you've got to get that teacher as close to that situation he's going to be in as you can and see how he does in it.

Now we researchers are supposed to be attacking the basic problem and finding out enough about the teaching process so we can help you, but it's going to be a while. It's going to be a long while and in the meantime, that's about the best advice that I think we can give you from this side. But I do think that's what Dr. Greene has said several times, and every time I want to get up and agree with him.

In the meantime, we can weed out some people, the people who never learned how to speak clearly enough to be heard in the class and the people who are obviously in such poor control of their own behavior that you could see that they couldn't achieve in a classroom. We could still do something like that, but look at what these people have now without bothering to prove that this is correlated with teacher effectiveness or not. One thing I know from all the research I've done and read, and one conclusion that's most sturdy is that there's no way to tell how a person is going to perform in the classroom, outside of the classroom; there's no test yet that will do it. I've got high hopes for simulations, but that's in the future, as you know.

David Ryans: I just wanted to respond to say I agree also with what Dr. Greene said and make two comments. Talking about prediction research in any field, we often talk about, or we've just roughly classified and people have talked about this for years, immediate criteria and intermediate criteria and ultimate criteria that are further along. For example, what the medical doctor is actually doing after he's out in practice 20 years as compared to predicting his grades in medical school which would be immediate.

I also wanted to add that in trying to predict, not criteria of teacher effectiveness but certain criteria that I chose to identify and try to predict, the further I went back, that is, did the predictive testing back in college days, the lower the correlations got with the criteria measures that we obtained when they were actually teaching. On the other hand, we could get some pretty high cross validity coefficients by taking two different samples and could get some very high cross validity coefficients with teachers who were on the job and at the present stage of their performance. I'm just agreeing, that's all.

Perry Kalick: I think that we can all agree that the payoff is in the actual classroom performance of the teacher. The

Board of Examiners is aware of this too in their giving of the performance and classroom teaching tests. However, the fact that these tests are expensive and relatively quite time-consuming propositions probably accounts for their increasing disappearance from the teacher selection process. In addition, a candidate's performance in a class of middle class children might hardly be indicative of his performance in the difficult class to which he will be appointed. I think the practicality of the use of the teaching test rests upon the question of how many samples of teaching performance are necessary and the question of whether there are enough funds available for the tests. Furthermore, there is the problem of logistics; i.e., where are you going to give the examination, and how many qualified people do you have readily available to make the assessments?

Dr. Brownell talks about not taking a chance. Can we afford to take a chance, particularly in view of the damage that is done in the first year of teaching? In the teacher selection process we have not yet been able to be predictive of teacher hostility in the classroom. Jersild would say that almost a classical analysis of a teacher is necessary to find out whether or not a teacher is going to do real damage, verbally and/or otherwise. In view of the cost of the latter, perhaps we should make pre-service teaching observation and the probationary period part of the selection process.

Douglas Bray: These comments sort of jell one of my observations to what I thought they were saying. I think the real gain is to be made by knocking off the bottom end of the scale. If you can knock out the one-third of the candidates who are manifestly lacking, you would make a substantial practical gain. You don't need these elaborate research designs to achieve this. One other comment on the criteria: many people seem to think that observation in the classroom would provide the best criteria just as in business people believe in training the supervisor to rate job performance. I'm not so sure, however, that simulation does not yield better criteria. You can not only have a highly trained observer group, but you can standardize the performance situation.

David Darland: There may be another factor we should be considering. In business and industry when they find that the structure is in the way of function, they change the structure. And they are much freer to do so. However, education is going to be reorganized. But I sense that statements being made here on the evaluation of teachers are based on the theory that the self-contained classroom is going to continue. Moreover, maybe the major cities of the United States are just simply unmanageable not only from the point of view of education but with respect to many problems.

Paul Denn: Thank you, ladies and gentlemen. The meeting is adjourned until 8:30 p.m.

Session No. 6: Open Discussion

Chairman: Paul Denn, Board of Examiners

Paul Denn: Mr. Charles Cogen, President of the American Federation of Teachers, has had a tremendous amount of experience with respect to large urban education, certainly because the largest part of his following is located in these areas, and he is acquainted then at firsthand with a number of these problems. I've asked him to get the ball rolling for us by telling us a few things about his experiences in large urban education and some of the problems as he sees them. Charles Cogen.

Charles Cogen: Thank you, Paul. As a host and also as a former colleague, Mr. Denn asked, as we were entering the room here, whether I would be willing and ready to make a few comments, I suppose representing the teacher's point of view--how the teacher sees this problem of urban schools and along with it, of course, the staffing of the urban schools.

Now, I've had my experiences in New York City, as you all know, as a teacher for many years and also as a lower echelon supervisor, as a department chairman. But I've also come into contact with many teachers and others, such as professors who have been in touch with the problem in their own areas throughout the country.

I think it is not so much a matter only of size of the school system that makes New York City so different from other cities. In New York by the very magnitude of its problem, the geographic situation, the ethnic problems, and so on, I think the problem becomes a qualitative one as well as a quantitative one.

Now from the point of view of the teacher. We are talking now about those who are thrown into a classroom situation right at the start of their careers; the teacher comes in, in most cases, without any real practical guidance, and is, I think it is fair to say, very much in a fog. One of the comments I made earlier in the evening applies very much here. There is not enough guidance given to the beginning teacher to set him at ease, to tide him over this critical stage. That confronts every teacher but in particular the teacher in the inner-city school.

And you have the problems related to the disadvantaged children. The teacher comes across these problems, not only of cultural deprivations, but also of the under-privileged from the point of view of emotional handicaps; also the problems of discipline that the teacher has to confront. This is something that every teacher has to face and is very much concerned about, as you know. And so I feel it is imperative that there be some way of overcoming the difficulties that the teacher has to confront when he comes into a setting of this kind.

Now I mentioned earlier in the evening the More Effective Schools program. I feel that something along those lines is imperative from the point of view of recruiting and retaining the teacher. We must have a setting where the teacher is able to give individual attention. I walked through a school the other day, one of the "more effective schools," and you would hardly believe that there were any real problems existent there among the children. The teacher has few children to handle, she has all kinds of assistance--teachers aides; teachers in training who really give some help, individual help; supplies of kinds that they never have elsewhere. These are things that help the teacher to overcome the great initial handicap which they suffer when they get into a disadvantaged school. And of course there is the problem of class size.

I would say that just about as important as anything else is this matter of large class size. This is especially significant in the school with disadvantaged children. In such a school, where you have also large class sizes, the problem is aggravated to a much greater degree. And so long as we do not adequately face this problem of class size, and also the problem which I haven't mentioned yet, of salaries, you're not going to get anywhere from the point of view of recruitment and holding on to the teacher. I was at the conference on the education of the disadvantaged a few months ago at the White House. There were all kinds of proposals that were made at the panels--remedial reading and ungraded classes, and so on and so forth, but you hardly heard anything at all, except from myself and my colleague from the American Federation of Teachers, on the two big questions of salary and class size. School systems are trying to run away from them, but I don't see how you can escape them.

And finally--not finally by way of covering the subject by any means, but from the point of view of the time limitation that has been imposed and that I want to impose upon myself--I think the problem of adequate supervision is extremely important. We need supervision that is democratic, that is helpful, and constructive; and I do not use these terms in the loose sort of way that is often used in college training classes. You really have to have a supervisor who is on the job with the teacher. I think one of the things that the Board of Education might consider in any city would be for a supervisor to do some teaching as well as supervising, just the same as a department chairman does in the New York City schools. The supervisor needs to keep his finger in the pie, so to speak, to realize what the problems are, to be really working on a colleague basis with his teachers rather than on a basis of superior towards inferior.

Now I know there are many other problems, but I think these are the major ones that teachers throughout the country in the large cities are thinking about and worrying about. Of course, you have the matters of non-teaching chores and the duty free lunch periods which are gradually being taken care of by collective bargaining procedures. I think this is the wave of the future, the collective bargaining that has begun in the major cities and has gone into the smaller communities as well, where teachers and administrators together work through their problems and get to a common understanding, rather than having decisions imposed upon the teachers from above without any clear thinking through from both sides of the table. These are some of the things that I think we ought to keep in mind when we consider the problems of recruiting and retaining teachers.

Fred Williams: Mr. Cogen gave the point of view of the problem that the teacher faces in the school of the disadvantaged and I would just like to be presumptuous enough to give the point of view of the problem the disadvantaged child faces with respect to some of the teachers we have who are not able to develop the kind of rapport necessary to do an effective job teaching that child.

Thus, when you mention ineducability with respect to the child as one of the problems, I would say that the problem takes place in reverse also. Sometimes we are not successful in giving the teacher whatever is necessary for that teacher to function successfully. This leads me to the heart of what I want to mention--that is, those elements that were alluded to earlier in the day, and which are considered to be essential for success in the inner-city. A couple of speakers suggested that we should look to the placement of the teacher in a specific situation because some seemed better able to function in the inner-city. This capacity is not one of the elements that is measured and I'm wondering if this is something to which we should turn our attention. What are these particular characteristics? Are they worth measuring or are we measuring them or can we measure them? Are they more significant than some of the things we are measuring? Are there any of them that are racially associated?

I don't want to suggest that there is any necessary correlation between color and these particular characteristics but, as a general premise, has the nature of the society in which we have lived created a condition which would allow a minority group teacher to have these characteristics for functioning in the inner-city to a greater extent than would be true of someone who is not of the minority group? This leads then to the next items, namely, the degree to which large cities have been and are successful in obtaining minority group members on staff, and how much effort is being made in staff integration.

Paul Denn: Well, Fred, you raised two questions in my mind. One is, can we train a middle class teacher, a teacher with a middle class background, regardless of any racial implications because there are middle class people of all nationalities and races to teach the children in the inner-city. And the other question is raised from an implication I got from what you say, can a teacher brought up in a minority environment teach in a middle class area? What I'm suggesting is that I think that both are possible. Would you agree or would you disagree?

Fred Williams: Paul, yes, I think that both are possible. What I am saying is I wonder if someone has a head start because he has lived a life more closely akin to these youngsters, either through economic circumstances or because of racial identification. Is such a person more likely to have the particular characteristics which would make him more successful at least in the development of rapport. I'm not talking now about methodology or content knowledge and so on. This is the point that I'm raising.

Paul Denn: I give the first speaker the prerogative.

Charles Cogen: Just one second. I think at one point I referred to the group as being ineducable; I really didn't mean it that way. Ineducable from where they stand under the given conditions but certainly not from a sound psychological and wholesome point of view. There is then the underprivileged and this is what I meant, they haven't gotten their proper orientation to the setting that they are put in and we have to give them this compensatory education, head start, and so on.

Harry Gilbert: It was because we realized there was going to be a good deal of attention to the problems of the culturally different that we invited to this conference a social psychologist and a sociologist. Each one turned us down after long deliberation, so we were stuck at the end and didn't have the representation of sociologists or social psychologists here. I want to make a few comments in this area, however. I feel very strongly that we're doing a very great disservice in our labels of the culturally different as culturally deprived, etc., and we're being downright racist, actually, in assuming a kind of homogeneity among these groups.

A very simple study that I've alluded to many, many times, conducted by our New York City Board of Education, seems to me a very great big eye-opener. I'm talking about Joe Justman's simple study of pupils he called stable and mobile. I'd like to take a minute or two to tell you about this because I think it nails down this great point of thinking we're dealing with a homogeneous group.

Justman took the youngsters in completely Negro schools in Harlem and Bedford Stuyvesant who were in the sixth grade. He found that about half of them had been in the very same school since the third grade, so he had records on these youngsters from third to sixth grade in the same school. He found that the mean IQ for this group, which he called the stable group because they were in the same school, was about 100.8 in the third grade and about 102.4 in the sixth grade, something we like to call a difference that is significant statistically but operationally not much different. But for the other youngsters, the other half, who were in the sixth grade but had transferred one, two, three or more times from third to sixth grade, he found that the initial IQ was 98 something and then 94 in the sixth grade. When he analyzed that further, he found that the kids who were transferred four or more times had gone from something like 88 to 84. The point is that the more transfers, the lower the IQ initially and the lower it becomes in the sixth grade. He repeated this study with achievement tests and got the very same results.

Now this is a simple statement of finding. These are facts; he found that these kids whom he called stable had an IQ and achievement just like the rest of the city, but the kids who were mobile started lower and kept getting progressively lower. Now when you take this whole group and put it together, you get the common finding that has been repeated over and over again, in other words...

Paul Denn: Harry, if I may interrupt...If you had taken the statistics only for the sixth grade, without analyzing them out or going back, it would look as if the whole group had regressed.

Harry Gilbert: And this is the common point that is repeated over and over again, that the youngsters in the schools in the slums start out lower and keep dropping lower. I think there's a massing effect that occurs there, and I submit it's a very racist kind of massing and something that should not be done. Now I'm certainly for our trying to see what teachers are successful for what children, but I think we had better be very careful of our analyzing the youngsters and not treating them as though they are a homogeneous group. This is a blind alley.

When Charley Cogen was talking about what we need, he mentioned all these things in the more effective schools, and a plague on that name, this is giving it a label and it's saying it's successful before it even is evaluated. I'm sick of calling projects "Higher Horizons" and "More Effective Schools" before we've evaluated them. By golly, you and I know that some of these schools are more effective than others, and I know that for some of the kids, the schools have been effective, for some they are not, and I'm a little tired of the way we've compressed and homogenized all the results together. What I'm suggesting is that the dimensions of this problem are so very deep and so very complicated.

I know something about these mobile kids because I was a school psychologist, and I've been in their schools and their homes. I think the schools don't know how to treat these children. I don't care what kind of teacher you're going to get, you cannot substitute for the dire effects of the deep social pathology. This has a long history, economics, political, social and there are a lot of reasons that are societal as well as personal and familial.

But if we're going to expect the schools to be able to treat these youngsters, then I think we're starting out with a bargain we'll never be able to fulfill. I think we better get ready to face the fact that we need some real social dynamics that are of an order that is unacceptable yet. That means taking these kids away from the home, and I've tried this. I have been in court on a neglect charge in a home where there was drunkenness, and the kids were absolutely terribly neglected. A smart lawyer made a monkey of me when he had the mother enter court in a nice black dress with a white handkerchief and a lot of tears. You can't take kids away from mothers, and any smart lawyer can make any foolish psychologist look even more foolish.

This is why I say we've got to do some things that are daring and different. I am greatly concerned about all of our programs, our head starts or whatever we do where we're trying things for large groups without really being analytical and diagnostic about what we're doing for whom. Excuse me; this is a topic on which I feel very greatly, and I can't help expressing it.

Paul Denn: You started by saying that we seem to have common problems all over the country wherever we have a large urban center and let's see whether or not that's so. Let me ask, for example, some of the people from around the country, what do you concede to be your most serious problem as far as urban education is concerned in your area? Let's start with Detroit. Al, would you?

Albert Schiff: I have listened with great interest to Fred Williams and also Charles Cogen's statement of problems as they view them. I'm not going to go into Harry Gilbert's now because Harry is dealing with a very small select sample of the thousands of youngsters we have in our classroom. In Detroit, the immediate problem we have is staffing classrooms with able, competent teachers. This is the problem. We have only two sources of teachers, (1) the beginning teacher, (2) the experienced teacher. If we have vacancies in the inner-city that we have not been able to staff, the Negro community would say, "See, how can we have quality education when you don't even give us a classroom teacher?"

It becomes a racial issue as well as a quality education issue. Out in the peripheral city area, if we can't find a math teacher, the community may accept it as a shortage of math teachers, but that same shortage in the inner-city has other overtones. There is no question that the Negro community can show that we have more substitutes filling regular positions in the inner-city than we have in the peripheral areas. And it doesn't make any difference what logical explanations you can give, such as "teachers still have the right to select the places where they want to teach." In the final analysis you can say, "Here is your assignment," but they still have a right to accept or reject that assignment. In Detroit, we place teachers under certain policies and procedures and Ted Lang raised a question about principals. Principals have little to say in the placement of teachers in Detroit. All a principal can indicate to a placement officer is his need for a math teacher. He cannot tell us, "I know somebody who is asking for a transfer to my school and I want you to give him that assignment."

Detroit operates its assignment policy--both initial appointments and transfers--in accordance with the "balanced staff concept." This means every attempt is made to have a well-balanced staff as it pertains to beginning and experienced teachers, race and sex. Detroit has an annual racial census. The last census in October showed that all schools in Detroit are racially integrated. We currently have 31 per cent total instructional staff who are Negro. This is why I look with great trepidation upon the theory that Negroes can best perform only in the area where they have a better knowledge of the culture of the Negro. Now, I don't know whether this is what Fred had in mind--but I am sure you can't have real integration of staff by limiting the placement of Negroes only in Negro schools.

The majority of Negro teachers are still in predominantly Negro areas. Our problem is to get more experienced teachers to move into the inner-city--and I hope the local chapters of the American Federation of Teachers and the National Education Association will help us in this area. What I am really saying is the time has come now when teacher organizations, who have a stake in education, must convince their members to help in the inner-city where experienced teachers are needed. Perhaps, a trial basis for a period of two years with the understanding that if it doesn't work out, the teacher can be returned to his former school. New York tried voluntary transfers and only a half dozen people or so were willing to do this.

In Detroit a condition of promotion to an administrative position is experience in the inner-city. This works all right for the few seeking promotion, but it still doesn't take care of the larger critical need to really staff the schools with experienced teachers in greater numbers.

Now, a word about actual placement. Here is a school that has two Negro teachers out of a staff of forty. That is not a truly integrated school. Not when 30 per cent of your teachers are Negro. There is now a vacancy in that school. We have eligibility lists--a social studies vacancy exists in that school. We have two sources:

(1) a transfer list of people who have asked for transfers, or (2) a beginning teacher list. We make the judgment to place a Negro in that school. In order to give this school racial balance we go to our transfer list until we reach the first Negro who has asked for a transfer to that area and we offer it to him. Or we go down our eligibility list for beginning teachers and we pick the first Negro to fill that spot. No if's, and's, or but's about it. This is the policy of the Board of Education to achieve a balanced staff. Racial balance is one of the factors in placement and you're not going to get racial integration if you side step these issues.

I think it's important that the teacher organizations help us. They want to help, but not when it's at the cost of teacher morale. When they start talking about what's good for the system and about the need for smaller class size and other supportive services, our reply should be these kids are without teachers now and they are in your school system. Can't we get the experienced teachers to go to these schools and help us during this emergency, because we can get all the beginning teachers we want to go into the more privileged areas. This is an easy thing to do.

I think I've spoken enough. I feel so strongly about this because people talk about what they want to do but when the chips are down, nobody is willing to take the stand and the personnel administrator is in the middle of it; the principal, God bless him, is in the middle of it; and the teacher is certainly in the middle of it.

Harry Gilbert: How do you know the race of a teacher?

Albert Schiff: Although we do not code teachers by race, almost every teacher whom you employ comes in for interview or assignment. Now we know that if you have transcripts from some southern universities or the teacher had attended a segregated school, we can assume we are not mistaken about race. Sure, we miss sometimes and often we make mistakes--we've sent some white teachers when we really thought they were Negro teachers--but we were right in about 90 per cent of the cases. By the way, Harry, there is nothing in the law that prevents the coding of teachers after employment. In other words, race cannot be a condition of employment, but we can code our teachers any time after employment. We don't do it in Detroit. Many of these people will be seeking promotion later on so even if the law provides that we may code them, we feel it prudent not to do so.

Paul Denn: Okay. Let's give Fred a chance to get in on this.

Fred Williams: I just want to respond to a point that you raised, Al.

I'm not in favor of the all black schools, staff and pupils or anything else, nor am I suggesting that only the Negro can teach a Negro child by any means. What I am saying is that because of the kind of society we have had, unfortunately, it may be that a Negro teacher, generally, may have a greater likelihood of developing rapport, and if this is an important characteristic, then we ought to try to tap it to the extent possible in getting this characteristic into our schools and taking advantage of it.

Paul Denn: Fred, I go for what Al said, namely, if we spread them around the schools. I think it's just as important for the white youngster to know the Negro teachers.

Fred Williams: Believe me, I've devoted much effort to this essential aspect and it is why I raised the corollary question of staff integration.

Paul Denn: As one of my friends used to say, "Let's not waste time in heated agreement." Jules?

Jules Kolodny: There are so many things kicking around here, I don't know where to begin; but, I'm going to start with the fellow at my right.

I would like to remind you, Al, that when you say you have an emergency today and cannot organize a program of smaller classes now because it will require five or ten years to develop, I would remind you that the Federations with which I am familiar tried to get you ready for today five years ago and ten years ago; and you didn't listen. When I say "you," I don't mean Detroit; I mean New York, Los Angeles, etc. People suddenly get excited about Watts when the thing explodes. But the Los Angeles Federation of Teachers has been talking about inadequate education there for more than a decade, so that it isn't quite fair to say that teachers aren't prepared to go with you, when you have allowed the situation to deteriorate.

I would like to go to the question of race and faculty integration. I sat down with a committee headed by Fred Williams and a few others. We worked out a plan by which our Central Placement Bureau would try to identify Negroes by virtue of the fact that we know we have ghettoes and even if you have a Bachelor's Degree, you are more likely to live in the ghetto or on the periphery of the ghetto as it moves north or south into a white community. And I think Ted would agree with me that the procedure worked fairly well. I don't think we had 100 per cent success; but we were able to identify Negroes by virtue of their address. This would include the graduates of southern colleges and the city college graduate, as well as the New York University graduate who lived at a certain address which was in a deeply populated Negro community.

Now, earlier in the day I talked about changing the courses that are required for teachers, and somebody took me to task and said I wasn't abreast of the times. Let me give you an idea of what I mean. I think this comes back to the type of thing that Ted has been talking about. I'm going to use a very simple illustration within the Puerto Rican community. A Puerto Rican child is taught from infancy on that when his elders scold him or take him to task for misbehavior, he should hide his head in shame. Then he comes to New York, lives in a Puerto Rican section of our city and the teacher scolds him. He holds his head low in shame, and what does the average white middle class teacher say to such a child? "When I'm talking to you, I want you to look me straight in the face." This is a cultural dynamic which is completely misunderstood with the best of intentions by the teacher. I use this as a very simple illustration of the kind of program I would like to see embodied in teacher training institutes in terms of group dynamics, cultural sociology, psychology, minority culture, history and understanding of things of the sort I described. I still think there's room for changes in preparation, despite the fact I was told that I'm not abreast of the times.

Let's go on a little further. We talked of smaller classes and life isn't quite that simple. Perhaps, if ten years ago when we talked of smaller classes, we'd be ready in 1966. But, when you talk of smaller classes in 1966, the answer given is that we don't have the space and we don't have the capital budget to do this. Now if you had the space, you would, by making your classes smaller, have a greater personnel problem because you'd need considerably more teachers. We recognize this problem. Perhaps what we ought to do is go into another kind of thinking. Try to keep a relationship of maybe three teachers and two classes, so that one is free to relax, one is free to pull three or four or six youngsters out for individual attention during parts of the day, etc. Because we are dealing with a totality as you affect one aspect of the problem, the reduction of class size, you impinge upon the lack of supply for personnel. But, that doesn't mean we have to throw in the sponge. We ought to give thought to new devices and I think that there are new devices.

Let me go on to the kind of teacher who is sent into schools in the disadvantaged areas. Teachers are members of the human race and they suffer from all the same disabilities and hostilities and hatreds. There is a small percentage of teachers who are racists; how they got by the Board of Examiners is hard to tell; but they did; and I meet them. But, the rest of them are not. They go into the schools with the very best of intentions and with real enthusiasm; but they don't have the knowledge and they don't have the skills and they don't have the tools, and Charley Cogen has pointed out that they're not getting the kind of help that they need. I think it behooves us to ask, "Why?" Then, maybe we ought to look at some of the supervisors we've licensed. After all, supervisors are former teachers, and whatever inadequacies they have are distributed in the same manner. Supervisors forget that they have been promoted from among the teachers; they try to put a halo over their heads as though they don't display this equal distribution of bell-shaped competency. They think that they are all equally competent. We have to look into schools in Harlem, for example, and the Harlems throughout the country and look at the holding power of faculties. Why is it when you have two schools, six blocks apart, one principal has a holding power and his seniority range of his faculty is that they stay there 11 to 14 years? And why is it that the next fellow, every September has to start with a brand new faculty? The two schools have the same student body, are in the same socio-economic area, same parents, and the same curriculum.

I think that we ought to look into this aspect of the problem. What is it that makes one person successful in this area and the next fellow unsuccessful? When the teacher gets into this situation, not only doesn't he get the help he needs, but he probably has a class that is difficult because of patterns of behavior resulting from retardation that already exists. The incidents of discipline are higher in this area and the teacher, therefore, falls into one or another category. He either throws in the sponage and says, "I've had it" after a short time, or he takes a look at the school and doesn't even show on the first Monday. Some of them will go on the Monday, stay Monday and Tuesday, and they never reappear on Wednesday. Some of them are more adaptable; they figure out a pedagogic device by which they can somehow or other control the discipline by the use of some sort of materials; but, it's not a true learning situation. The kids are managing not to kick up and then we wonder why, at the end of the year, there's reading retardation. The reading retardation is there because there has been schooling, but no learning during that entire year.

There is the really professional teacher who wants to do a good job but he really is inadequate because he has never learned the necessary skills from his college training. Nor has he gotten it from his principal. It may very well be that the principal doesn't know how himself. It may well be that the principal starts with the attitude that a lot of these kids are ineducable and that if you just hold them in line, "that's the best and the most we can expect from you." I've heard this from some principals around town. What I'm really asking for here is that we begin to look at the college program; that we begin to look at what's happening in the schools; what's happening with respect to the kind of supervision we get.

We must see a distinction between the "mobile population" and the "stable population." It's shameful, but the permanent record card has a tremendous story to tell at any time, including the number of times a child has moved when he comes to a particular teacher in the fifth grade. What has happened to his scores as he stays longer in school is that they have leveled off at a plateau at the fourth grade or thereabouts. We could make use of this data in a much better way if we had the facilities. Unfortunately, our psychologists go and become members of Boards of Examiners and then Deans of colleges; so, we don't have enough psychologists; but I think this is an area we could look into.

What I am saying is that the pathology that Harry Gilbert was talking about is present in a much larger percentage of the total population than you're willing to conceive. It's a very significant part of the population and it's the part of the population that interferes with the normal learning process of the kids who are not as mobile and who really are stable and would have ordinarily done well. I think we ought to determine whether we can develop coresidential centers. Because the question of getting parental consent is very difficult, as Harry indicated, there ought to be the kind of program that might be long time day schools, starting at 8 o'clock in the morning and returning the child to his home at 6 o'clock in the evening. There is a tremendous value in this kind of program. Such a setting should have the proper clinical attachments to the school and be properly designed to give it a home effect. When you go into a modern high school and examine the Home Economics Department, you see a lovely apartment. There is absolutely no reason why this kind of plan couldn't be built into this kind of center. It costs money; it costs a lot of money. I'd like to see superintendents of schools, chairmen of departments, and principals fighting as hard for more money for the schools as Charley Cogen has fought and as some of the teachers have fought. Instead, they place their emphasis on an index for salaries.

What I would like to see is an amalgam of the parents who are so disgruntled (and rightfully so) since their children are not learning, together with the entire professional staff, marching together and indicating that we are suffering from a very severe social disease which requires fantastic sums of money. Now, I don't want this money to go into auxiliary, after-school services. I think you're wasting your time. Uncle Sam appropriates lots of money and it goes into trying to teach the kid how to read between three and four in the afternoon, when for 7, 8 or 9 years of schooling between 9 and 3 he hasn't learned. This is very nice added income for teachers. My membership would be disgruntled if they thought I was taking their extra income away from them; but, educationally, it has little value. If you're going to get money from Uncle Sam, let's put it into the kind of day school program that we require and not waste it in these peripheral auxiliary, after-school activities, which look good on paper, but don't do the job!

Paul Denn: Thanks a lot. I'd like to get around the country. We got as far as Detroit. How about Chicago, Los Angeles, Washington?

Wayland Baldwin: I'd like to say something about Los Angeles.

Paul Denn: Would you? Not a speech--just some of your problems, or ...

Wayland Baldwin: Frequent references were made to this program as conducted in New York City. I expressed a personal opinion to the effect that I would like to see a More Effective Schools program for all boys and girls in Los Angeles and in New York. The program as conducted in New York includes less than 1 per cent of the students in disadvantaged areas. With our limited finances we cannot implement this type of program without jeopardizing the educational program of the rest of the 800,000 boys and girls.

Paul Denn: How about other areas of the country, Philadelphia, Chicago?

Richard Sanders: I am Dick Sanders from Chicago, and I have been listening with great interest for two days. I see many of our Chicago problems appearing in other cities. May I get back to this business of teacher selection and how it relates to what we have been talking about here.

Illinois law, at least as it relates to teacher selection in Chicago, is a little like Federal Civil Service as reported here. The State Legislature has said, in very few words, that a board of three examiners shall examine all teacher candidates in character, scholarship, and general fitness, and prepare eligible lists from which appointments must be made in the order of merit.

The statute ends there, so all the rest of the job is ours. This is good in many respects because it gives us (the Board of Examiners) a great deal of flexibility but it also means what it says. We must provide merit lists and appointments must be made in the order of merit. We could not do as Al Schiff says they are doing in Detroit, because the law would not permit us to do it that way. Our personnel department must appoint in the order of merit.

Perhaps a few figures would give an idea of our problems. We have a total educational staff of about 23,000. About 75 to 80 per cent of these are regularly appointed teachers who have been appointed after taking examinations and appearing on merit lists. This leaves us with about 6,000 positions this year that had to be filled with teachers holding temporary certificates. To do this and to provide qualified substitute teachers, we have issued since July first about 11,000 temporary certificates. We have an over-supply in many areas, and a shortage in a few areas. If it were not for the fact that we could use our surplus High School English and History teachers in our elementary schools, we would be in trouble. In order to provide more available teachers for our elementary schools and for a few other areas of shortage, we have issued several hundred Provisional Temporary Certificates to candidates who have Bachelor's Degrees. These teachers must accept assignments where needed and agree to pursue a program of professional preparation.

I do not think that certification of qualified teachers is the real problem in Chicago, except perhaps in some shortage areas which exist nationwide. The real problems are shortages of positions where teachers are willing to accept assignments, and shortages of incentives for an intelligent deployment of our staff.

This problem is very complicated and we have talked about it here, but I do not think that many of us have come to grips with this problem on a total school system basis. We have all tried some little incentives to lure professionals into the inner-city. We have tried better training of people, but it seems to me that we have never made a real frontal attack on this business of staffing schools in the inner-city.

Perhaps I am a little too practical and think in the ways of industry. I said once today that if you work in a steel mill, your salary is related to how close you are to the heat. You make the most money as the superintendent of a blast furnace or an open hearth. You make the least money far away from the heat and the hazards.

Now, I am not saying that I believe in "combat pay" and maybe it is impossible in our business to give more pay for the same time worked, but in Chicago and perhaps in other cities we could give more annual pay to people who are willing to work in the inner-city. We could guarantee them twelve school months of work and thirteen school months of pay with one school month (four weeks) vacation. There are other things that we could do, as Mr. Cogen suggested, some of which would involve improving the working climate and conditions such as reducing class size.

I would emphasize that I do not believe our major problem in Chicago and perhaps other large cities is certification, nor is it a critical shortage of teachers. The shortage is in our ability to reduce the heat and the hazards, and in our willingness to pay the people the amount of money necessary, in one way or another, to get them to do the job that we need done.

As long as I have the floor, I find I want to make another distinction which appears to get muddied up here in our discussions. It seems to me that large cities, in general, have a legal separation of certification and placement, and at this meeting we try to put the two together. Legally they are not together in the City of Chicago.

The law says that the Board of Examiners must examine character, scholarship, and general fitness of all candidates to teach and place successful candidates on eligible lists in the order of merit. The Examiner's function ends right there. Appointment in the order of merit and intelligent deployment of staff is a personnel function.

Sam Brownell was saying that big city problems are unique, and I am sure they are, at least in connection with teacher selection and staffing. I would agree with him that in a market of a great shortage of teachers, our main job is the elimination of poor risks. On the other hand, in areas where we have a surplus of teachers, our job will continue to be the selecting of the best according to our needs.

It should be made clear that Examiners are selecting potential teachers and not presenting full fledged professionals. It is the function of school administrators to make them real professionals during the probationary period or to decide that they have failed. Much of what we have been saying at this meeting is concerned with this second level of teacher selection involving in-service training and in-service evaluation.

Paul Denn: I think the nation's capitol ought to have something to say here.

Rufus Browning: I think we have a problem that is different from those you have been describing. We work under Congress, and God bless our Congress because last week it raised my pay and I am in a state of euphoria. The teachers' salary plan and everybody's salary, except the Superintendent and his single deputy, went up approximately 9 per cent and we needed it. President Johnson signed the salary bill a week ago. The week before that when he got back from Southeast Asia, he signed our budget. You may think that is the budget for next year; it is not! It is the budget that's supposed to start this past July first. Since July first, we've been under the same budget as the one from last year. Now in the middle of October and November we have the job of finding 515 new teachers, including counselors and librarians. Now that to us is a sizeable task.

Problem number two: Washington, D. C., Negroes now constitute 91 per cent of the student body. This and the fact that most of the whites are congregated west of Rock Creek Park make it an almost impossible situation to have classroom integration. As far as staff integration is concerned, we do have a lot of it, but the integration is very imperfect. I personally am dissatisfied with the integration of staff, but as a personnel man, I have little control over assignments. Two out of three of our teachers are Negro as are two out of three of our administrators and supervisors. We're having a great deal of difficulty in locating highly qualified white individuals to become teachers. Our white people, either through the fact that they are disappearing in our system or they dislike the situation, are now applying for supervisory positions, principalships, etc.

One of the problems which has been partially solved concerns our procedures for employing teachers. The Board of Education recently changed our teacher employment rules, which makes it possible for us to better compete with our blue-ribbon, silk stocking suburbs. We're surrounded by such suburbs and they have approximately twice as many people as we have in the city. As you know, the boundaries of our city never expanded. We have now changed our rules so that we can take advantage of what is perhaps our greatest attraction, that is being in the shadow of the Capitol dome. We probably have more good walk-in candidates for teaching positions than any city of comparable size. When the bureaucrats come to Washington, very often their wives want to teach. The wives of officers, scientists, etc., also provide us with a fine pool of talent. Under our old employment rules, which were very wonderful for the depression years, we were too slow to process teacher applicants and the people went to Arlington County, Virginia, Montgomery County, Maryland, or somewhere else. We now have rules which permit us to compete with the suburbs and our salary schedule is the best in the area. Of course, our salary advantage will only last for about one year, because the suburbs are already acting to meet our current teacher salary schedule.

Paul Denn: Well, thank you very much. You've been an awfully good group; you've participated, and I've been a poor chairman because you participated all along and I let you run much too much overtime.

Session No. 7: Needed Research in the Area of Teacher Selection

Chairman: Murray Rockowitz, Board of Examiners

John C. Flanagan, American Institutes for Research in the Behavioral Sciences
Harry B. Gilbert, Pennsylvania State University

Paul Denn: Again, now I begin to feel that our conference is a success because when I see various members caucusing before they come in to the plenary session, it looks as if we've had some effect on some of the thinking on the part of members of the group. This gives me an opportunity to express the thanks of our Board and of the group as a whole to the powers that made it possible for us to meet, the U.S. Office of Education, represented by Dr. Steiner. We'd like him to stand up. (Applause) Thank you very much. Dr. Steiner is the Associate Research Coordinator, in charge of Elementary and Secondary Research in the U.S. Office of Education which has made this conference possible and which I trust will make other conferences of a similar nature and on similar problems possible in the future. I'd like also to express my deep regret that Dr. Bogen, the Chairman of our Board, was not able to be present at these meetings. I think I told you when the conference first began he suffered a very severe knee injury, a torn cartilage, I believe, and had to undergo an operation. We understand that the operation was successful, and he's resting comfortably. I think he would have been much happier, much happier than I, I think, here at the lectern, but I'm sorry that he could not attend.

I also want to state my regrets that, not realizing that I was going to be thrust in this position, I made some other commitments and I plan to leave this morning. So I'd like to take this opportunity to thank all of you for cooperating so nicely and so effectively and making this job that much easier for me. And while I'm in the mood to thank, I'd like to thank the members of our Board and the research associates who did the planning, did all the preparation, again who made this an easier task all around: Dr. Bogen, Dr. Gilbert, Dr. Perry Kalick and Dr. Gerhard Lang, and of course, Mrs. Louise Klein.

Finally, I'd like to thank all my colleagues on the Board of Examiners, each of whom had a specific task to carry out in the course of the conference, chairing various panels. Much as I dislike to say it, there are a considerable number of benefits that arise from a war crisis. Research, for example, is carried out under pressures of war much more effectively, much more rapidly than in ordinary peace times, and the finances for such research miraculously become available. Most of this research we know is in the biological and physical sciences. But I recall that in the course of World War II there was a considerable amount of research in the development of personnel instruments. The assessment of personnel, for example, was an important factor, the work of the OSS, and of various war agencies in England and elsewhere. Perhaps with the war on poverty some more worthwhile needed research, particularly in the area of education where we know it is badly needed, will result. And this morning's panel is devoted to the problem of where to place that research. I'd like to turn the meeting over at this time to my colleague, Dr. Murray Rockowitz.

Murray Rockowitz: Thank you, Paul. For me this conference has been an intense personal experience. As the junior member of the Board of Examiners, I've seen a lot of names become people, and in the research field alone, for example, I used to read the studies of David Ryans. Until now, he was a name and last night he became a living being for me, and the legendary figures like Brownell and others have become part of an environment of which I am a part and, therefore, I can say that this has been for me a very exciting experience--that of sharing the thinking of these very considerable individuals.

If we were to look at this entire conference as a developmental lesson, we are in the position of giving out homework assignments this morning. We're going to tell you and I say we, the panelists principally, are going to tell you what you have yet to do in terms of further study in order to effect the objectives that we all came here to discuss.

Dr. Schiff was much surprised by the budget of the New York City Board of Examiners--1-1/2 million dollars per annum. And yet, we have here with us the two research associates that the Board has had in the last few years, and we never could get them together at one time because of budgetary limitations. The maximum research staff that the Board had available to it to evaluate this 1-1/2 million dollar yearly operation was one research associate. And even as good as each was individually, each year I think we'd agree that this allowance was inadequate. A few brief words with regard to the functions of research.

Last night I just listened to a number of statements and I heard all kinds of assumptions being made. For example, an assumption was made that a school could not be staffed because of the peculiar nature of the principal, alone. Another assumption that was made was that empathy between teacher and student is more easily attained if there's a close match--social class of teacher with social class of student, race of teacher with race of student--we can go on with religion, national origin, etc. These are the types of assumptions that have to be tested in the crucible of research.

I was told that it's nice to inject some levity into the proceedings. I can advert to Oscar Wilde's classification of lies. He says there are ordinary lies, white lies, and statistics. Research can be perverted, and it has been. Hitler had his research staff, and Garrett is considered a research person too. Research has been perverted to national interests so that the Soviets discovered baseball, but what we're talking about now is the type of research which seeks the answers to persistent questions. I think that what came out of yesterday's discussions was a general feeling that there's a great deal that remains to be done. Dr. Bray indicated that we hadn't even gotten to the problem of establishing criteria, and Dr. Ryans stressed that the criterion problem was still primary in his thoughts after a few decades of work in the field.

This morning, we are very privileged to have with us two gentlemen who have extensive backgrounds in research. Dr. John C. Flanagan fills in the gap which was left by Dr. Bray yesterday morning. He's a Harvard man and he received his doctorate from Harvard in mental measurement and went on to extensive experience with the cooperative testing service of the American Council of Education. He did memorable work in the Air Force in selection of personnel and for the past 20-odd years he has been connected with the American Institutes for Research which he founded and of which he is the director. His most extensive current project, the one which is being watched with considerable interest, is, of course, Project Talent. I feel very privileged to present to you now Dr. John Flanagan.

John Flanagan: I have been very interested in getting back in touch with the field of teacher selection after many years. In 1939, at the suggestion of Ben Wood, I wrote a proposal to get the National Teacher Examinations funded by the Carnegie Corporation. Dr. David G. Ryans was selected to undertake the direction of this program. Since then some progress has been made but as Dave and the other people who are working most intensively on this problem indicated yesterday, they have hardly scratched the surface in the past 25 years and it is certainly time for a real major effort. I'm very encouraged about the likelihood that a major effort will be made on the basis of what I heard yesterday, and it seems to me there are problems. We have difficulties, but they do not represent insurmountable problems.

I can recall a group of researchers sitting at lunch in the Pentagon and saying, "What we ought to do now, right in the middle of World War II, is to bring in an applicant group within which we don't do any selection and see what happens. We'd find out whether our procedures are valid. Nobody will believe now that we're only selecting the top-scoring applicants for training, that the others would do as poorly as we say. They'll say we don't really know what the other people would have done, and we're losing a lot of pilots because you're eliminating them before they start training." We all agreed that headquarters probably wouldn't let us do this but we really should try. So it was suggested that one of the people would write such a proposal and see if we could get approval for it. This individual gave it such low priority that a week or two later he hadn't gotten to it. He said he felt it was a waste of time to prepare such a proposal. So I sat down and started to write the proposal, and the more I wrote the more reasonable it seemed. By the time I got through, I thought it sounded so sensible they wouldn't turn it down, and they didn't.

They let us bring in 1,000 applicants. All the applicant had to say was, "I want to be an Aviation Cadet," and he became an Aviation Cadet, no matter what he scored on the screening tests. They all wanted to be pilots, so they became pilots regardless of their scores on the classification battery. This gave us a real picture of just how effective our procedures were.

A situation which is more analagous to the one you have at the present time developed after the war. It became quite difficult to find aviation cadets and the personnel people said, "We can't afford to screen and classify these people the way we did before; we just have to take what we can get." So we came up with the suggestion to continue to give the tests but accept all of the otherwise qualified applicants to determine how the procedures were working in peace time. The statement was already being made that tests may provide an effective screening device, but in peace time it's a different situation. The training is different, and you can't generalize. This was accepted and again we had a very good experimental group. The group was experimental because everybody was being taken in as was described in the recent experience of some of the school systems yesterday. Thus, we had a very fine opportunity to again find that the procedures that were being used were very effective.

These procedures were developed using research methods. After listening to the discussion yesterday, it appears that a good deal of research is needed in this field and I'd like to run over, under four headings, the kinds of research that I think ought to be done in the next few years. The four headings that I have are: first, determination of the patterns of teacher behaviors which define effective teaching; second, the evaluation of the effectiveness of teaching performance; third, the prediction of teaching effectiveness; and fourth, factors which cause good teachers to leave teaching. This seems to me to be a part of selection, although it's negative selection.

The first of these is research on determining the behaviors which constitute effective teaching, and I propose this be given a new orientation. The principal characteristics of this new orientation are that instead of a single set of specifications for the requirements of an effective teacher, there should be a very large number of sets of requirements defining the behaviors which make for effective performance of each of the various aspects of the teaching task. Although such an analytical approach has advantages, it becomes of great value in a situation in which the activities of the teacher are likely to change markedly with the advent of new teaching methods, new objectives, new technology, and the provision of clerical assistance by computers and teaching aids.

Effective teaching in the past has involved many activities such as lecturing, maintaining discipline, leading discussions, checking on students' learning, correcting students' errors, stimulating students' thinking and arousing students' interests. Although many of these activities are likely to be important for effective teaching in the schools of the future, it seems probable that there will be considerable change in emphasis. More importance will be given such activities as individual tutoring, assisting students to plan their educational program, developing a sense of responsibility in the student for his own educational development, helping him to discover his interests and special abilities, helping him to discover the satisfactions that can be obtained from creative activities and assisting him generally in his personal and social development.

Since it's unlikely that most of us will be able to predict the precise nature of the teacher's role in activities in the school of the future, it is of considerable importance that we carry out research to define the requirements for effective teaching of many kinds. It is also important that in gathering this information, the characteristics of the individual student involved in the teaching activity be clearly specified. It seems likely that the requirements for motivating one type of student are likely to be different from those for motivating another.

In carrying out research in this field, it is proposed that task analysis procedures and the critical incident technique be used. These can be supplemented by other observational analysis procedures. A device which has already shown its value in this type of research is a video camera which can capture the teaching situation and play it back for observation and analysis as many times as is required. The procedures of task analysis are likely to be of special value in developing requirements for new types of teacher activities. Of course, in using this procedure the characteristics of the student, his previous knowledge and many other factors can be specified and varied at will.

The critical incident technique also makes possible the detailed description of the specific student and the definition of the particular aim of the teacher's activities. It should be of great value to collect many thousands of incidents, each of which is classified according to the type of student and the specific teacher activity involved.

Before we leave this matter of teacher requirements and the study of teacher requirements involving observation mentioned in some of yesterday's presentations, I should say that perhaps the study of teaching as it's going on now will be fairly inadequate. I recall an instance which occurred in carrying out a study for a corporation of third-level managers. We did a very careful study using task analysis procedures; we had somebody watch and record what they were doing every minute, every 5 minutes and for a whole day. Since a number of people were in this position, we obtained several thousand critical incidents. We gave this company a very good picture of just what their people were doing. This was to have been the prelude for selection, but when they looked at our report and saw what their people were doing with their time, they said, "Oh no! We don't want any people selected to do that job. As our first job, we're going to change the nature of this job."

We might find a similar set of circumstances if we went in and found out what our teachers are doing every five minutes by using a time sampling. We might very well say, "We don't want to select teachers for that job; let's change the job." I'm suggesting we get requirements for each task in the job, then we can change the emphasis without major change.

The second area of need in research is the evaluation of the effectiveness of a teacher. Of course, in this case also the focus would be on the effectiveness of the teacher in each of a wide variety of activities with each of a number of types of students. Teacher effectiveness may be evaluated either in terms of the process or the product, as assessment procedures are developed which measure all of the desired changes in student behavior. The computers provide efficient storage and analytical procedures for these data; it seems likely that much more detailed records can be collected and analyzed than has been characteristic of past evaluation procedures. It appears that if individualized educational development procedures are used, we'd set specific attainable tasks for each student, the details of whether a particular teacher or student attain the goal specified will provide a much more precise record of teacher effectiveness than has been previously available. High priority should be given to research and development work on procedures for a comprehensive evaluation of the teachers' effectiveness in many activities with many types of students based on systematic measurement of the effectiveness of the instruction.

It also seems desirable to continue research on process variables in teaching. It is suggested that the most promising line of research on process variables involves systematically developed observational record forms on which specific observations by a competent judge are made of effective and ineffective performance on the part of a teacher. These, of course, should be related to the particular activity and the particular type of student involved.

A factor which could have considerable influence on the quality of teachers is the use of merit increases and the assignment of tenure status only as a result of demonstrated effectiveness. This was mentioned yesterday. The lock step promotions characteristic of many school systems and the failure to eliminate the ineffective teachers produce a situation attractive only to the mediocre and marginal teachers. Of course, improvement in these areas must be based on valid procedures for the evaluation of teachers. Research on the evaluation of teacher effectiveness should be given much attention for another reason which is its essential importance to other types of research on teacher selection.

I should perhaps underline at this point the difficulty of product evaluation of teacher effectiveness. In many studies over quite a few decades now it has been shown that within the variation in quality of teachers that we find in the United States, the difference in the amount the students learn as a result of being taught by one of the better teachers rather than by one of the poor teachers is relatively slight. It is only a few per cent.

When we're talking about the problem of what effect the teacher has, we have a situation in which in the total variability in students' performance only a small proportion of it is under the control of the teacher and can be attributed to variation in teachers' effectiveness. From one point of view this can be regarded as a good thing, since even if we don't have very good teachers the students will learn anyway. Although this may be the case in many instances, it does represent and provide problems when we are trying to do research in this area.

The third area of research relates to the development of predictors of effective teaching. It appears that long range follow-up studies are among the most important approaches to this problem. It is anticipated that data from students tested as twelfth graders in Project Talent who have graduated from college and entered teaching will become available this fall. Similarly in the next three years data from other classes will be collected and analyzed. These data should be of distinct value in defining the type of individual who enters a teaching career. Of even greater value will be the ten-year follow-up plan for Project Talent which will begin in 1970. These studies will provide data on those who have, insofar as we can measure it, not only selected careers in teaching but have been found to be effective teachers over a substantial period of service.

As in the case of the other types of research studies mentioned, it seems important that predictors not be focused on the quality of teachers in general but rather the effectiveness of the teacher in performing specific roles and activities. It is also believed that the trend in research with respect to predictors will be in the direction of a very large number of specific predictors rather than a few more general measures. Drs. Bray, Baker, Medley and Mitzel all emphasized the need for supplementing pencil-and-paper aptitude types of tests with other types of information on the teacher. I might say that as an old line measurement person I thought some of them overemphasized the need for supplementing these predictors. In several recent AIR studies it has been found that pencil-and-paper validities could be increased by situational performance tests and by different kinds of observation of performance in a realistic situation. I'm sure that a procedure which does not include such observation of behavior in relatively realistic teaching situations is going to be less efficient than one which does have tested and validated measures of this type.

The last area of needed research relates to the conditions of teaching with special emphasis on those which have negative selective value. It is well known that the turnover in teaching is very high, and it seems important to determine why teaching loses some of the most effective individuals. One of the problems calling for research in this area is the effects of family duties on remaining in teaching. It would seem worthwhile to study the question of whether part-time employment or something less than full-time employment might retain some of the better women teachers.

Other research topics in this area relate to the study of specific teacher activities particularly with a view to determining whether or not some of the clerical and administrative duties could be performed by teacher aides, clerks, or computers.

Another valuable study might be directed at the question of why many promising young teachers leave teaching early in their careers. It seems likely that the administrative practice of assigning new teachers to difficult classes, loading them down with the more unpleasant extracurricular assignments and similar procedures which give the new teacher a bad initial impression of teaching are responsible for losing effective teachers.

In conclusion, it is believed that the new methods of teaching will make it possible to evaluate teaching effectiveness much more precisely than has been the case in recent years. This will make research on the characteristics for effective performance in specific teaching tasks both feasible and important. As proposals for new educational programs are developed, they should be accompanied by plans for research on the teacher's role and activities in the new program. Perhaps one of the greatest needs for research in teaching is the application of systems concepts to the teaching and learning system. This application would include comprehensive measures of the in-put and out-put of the system as well as study the process variables. For such studies to be effective, much better measures of the in-put and out-put of the system in terms of assessing the student's behavior concepts and abilities will be required than are now available. Perhaps the first step in a program of teacher selection should be the definition and development of measures of the products of teaching. Unless we have valid measures of the effectiveness of a teacher's efforts, other types of research must be regarded as tentative, exploratory and perhaps in many cases trivial.

Murray Rockowitz: Thank you Dr. Flanagan, that was a very large order and a quite complex homework assignment for us, but I think we welcomed your considered remarks.

Our next panelist is a gentleman whose very considerable shoes I'm trying to fill. I inherited Harry Gilbert's responsibilities on the Board of Examiners, and aside from a deep personal debt to him which I publicly acknowledge, I am finding out that the job he did, the image he created and just about everything that he associated with the job has created a kind of halo effect for me. He wears two hats at the present time: he's still a member of the Board of Examiners but he's also Assistant Dean for Resident Instruction at the College of Education of the Pennsylvania State University. In New York City, he served as a teacher of children in classes for children with retarded mental development, he was a school psychologist and a supervisor of school psychologists before becoming an examiner. With typical tongue in cheek, he likes to refer to himself as a clinical psychologist in sheepskin clothes. Dr. Gilbert will now lead us further along the path of needed research in teacher selection.

Harry Gilbert: There are three basic assumptions that underline the specific proposals I shall outline. Permit me to make them explicit. One, interest in the area of teacher selection is minimal, based upon the actual amount of research under way. However, a great deal of interest does exist among teacher personnel selectors and universities. The problem is to make patent what's latent. Two, professional teacher selection practices are rarely employed. In large school systems that are presumed to be using selection techniques, screening is actually done. In smaller, affluent school districts, hunch rejections and global perusals sometimes in actual observations, serve as selection techniques. A moment's reflection on the current shortage of teachers particularly in those school districts perceived to be tough will confirm the probability that this assumption is warranted.

I want to digress from my own paper for a minute to indicate that I think that screening is a highly important process. It was mentioned here earlier, and I'm particularly indebted to Medley for the use of the achievement test concept vs. the aptitude test concept. There is no need to be bashful or abashed about our using this concept of expecting a certain degree of achievement for prospective teachers. This brought to mind a very recent experience. I was walking through a school in a city I shall not name and it happened to be on a day when there was a city-wide testing program; one of the teachers had put a sign on the door, "Testing, do not distrub." As I walked through with the principal, I laughed about it and made some comment to the principal that this is one of the occupational hazards, when you teach children with reversals, etc., and he said, "No, this teacher can't get a regular license; she fails the test for written English." It isn't funny, and those of us who use tests of written English recognize that a fair number of college graduates cannot demonstrate that they can write acceptable English. So I'm not at all disturbed about this achievement test model, I think it's a good one. We can probably refer to it as content validity if we wish, but nobody is going to take away the responsibility that selectors will have for making a judgment about some expected achievement a prospective teacher will have to be able to demonstrate.

Now the third of my assumptions is this: Since the field of teacher selection is a great big area, up for grabs, it is most desirable that research be encouraged in varieties of approaches, without too much specificity. It follows, of course, that wide dissemination of research be encouraged, and that investigators be supported with the notion that hypotheses may be rejected as well as verified by experimental data. Regrettably, this simple dictum, readily understood by researchers, seems to be a heretic notion in an age when innovations are publicized as successes before evaluation.

Again on this notion of encouraging a variety of approaches, John Flanagan's being here reminds me that he headed the Air Force Selection Program, and I worked in the Naval Aviation Selection Program (John Jenkins headed my group). Here were two very competent psychologists who started out with very similar problems and came up with very dissimilar answers.

The Air Force approach included a large number of psychomotor tests. I went through one of their testing stations at San Antonio and it was like a New Yorker's conception of a psychologist gone wild. There were all kinds of intricate psychomotor tests. The Navy, by way of contrast, came up with a fairly short series of paper and pencil tests, a biographical inventory, a short intelligence test, Bennett's test of mechanical comprehension. And yet when you looked at the results of their validity studies, I can see John's stanines now and the relatively smaller degree of failures in training as you go up the stanine ladder. A very impressive example of the use of their tests, but the Navy came up with the very same thing, and the results were almost the same as you went up the ABCD categories that were used in the Navy. I'm commenting here that starting with the very same approach, the same problem, two utterly different approaches resulted, and they gave about the same results as far as I could see.

Now for the proposals. One, attention must be paid to the process of stimulating attention to the methodology of teacher selection and to research, which must be inevitably an assessment of the validity of presently employed procedures and those yet to be tried or designed. Surely we can agree that fundamental research on teacher behavior and on pupil-teacher interaction as an outcome of the teacher stimulus must be encouraged. What is needed is understanding of why so important a field for research continues to be neglected, despite promising starts by such as Withall, Mitzel and Ryans. The simple answer, too difficult, seems not enough in an age when complex problems are tackled with the resources made available by contemporary cash flow. I suggest, therefore, that social psychologists and sociologists be invited to investigate broadly the field of research in teacher selection for their aid in understanding avoidance attitudes of potential research workers. There is no disposition to hide the obvious, that I have made a value judgment and that the purpose would be to be able to persuade research talent into action in this sphere. I propose, too, that we evaluate the effectiveness of the design of this conference with its influential participants as a means of stirring interest and action in teacher selection practice and research.

Two, we should take advantage of the current supply and demand in the area of teacher selection. Specifically, I refer to the shortage of teachers as the country begins to wake up to the great big need for teachers and pumps green blood into local school systems from the great big Federal artery. Teacher shortage gives the personnel research man a rare opportunity. He can lower his selection cutoff scores to provide a greater range for assessment of predicted validity. It would take some degree of courage to do this, although some reflection on the lack of predictive validity data should be encouragement enough. Now this is a point that Mitzel made earlier. At the same time, there is always an over-supply of applicants for supervisory or administrative positions in education. This should serve to be a source of comfort for those who would argue that one cannot be selective or try to be, with teachers when we need all who apply. Furthermore, it is palatable to applicants to be fed a variety of selection techniques when there are more applicants than positions to be filled. This presents the opportunity to employ varied and multiple devices toward a socially accepting, even willing group. Specifically, I'm suggesting that we ought to throw a good deal of energy into the selection of supervisors where we do always have an oversupply.

Three, I now come to some specific proposals. First, I make reference to the sixteen suggestions for further research on pages 55 to 57 of "Teacher Selection Policies and Procedures in Large School Systems in the United States." That is the first study that we completed in this series. There should be enough ideas here to generate several bushels of Ph.D.'s or Ed.D.'s. I should like to take the time to express myself on the perennial dissuader, the lack of sound criteria. The fact is that sound criteria exist only in relatively simple occupations and not in complex professions. Worker output in terms of quantity or quality or time or a combination thereof can be employed as criteria for production line employees, but everybody knows how hard it is to define "success in teaching," particularly since this amorphous generalization, bad to begin with, keeps shifting in different school settings at different levels and with different subjects. At least we have learned from previous study that the overall general estimate of "success in teaching" is a concept to be discarded. We can work with dimensions of teacher performance as the local hiring school systems define them. This is important; these dimensions are going to be defined differently by people who hire them, but I think Harold Mitzel made this point earlier. These dimensions may be with respect to teacher behavior such as "evocative of pupil participation," "encouraging pupil-pupil interaction," "accepting of deviant behavior," etc. They may be with respect to the ultimate in expectancy, namely, pupil development in skills, knowledge or attitudes. Let's not beat a dead horse. We can all agree that research is necessary to refine and to define the dimensions and to determine methods objectively or reasonably objectively to assess them. I propose that we accept crude estimates of the extremes in dimensions and not wait for the millennium. I propose that we engage task forces of teachers, teacher educators, school administrators and personnel experts to agree on working definitions of dimensions of teacher behavior on a scale from most desirable to least desirable. Then obtain nominations for extremes on these scales, the best and the worst. Various procedures can be employed for these nominations. They can be peer nominating techniques, observer ratings, supervisor ratings, pupil nominations and measured pupil performance. Hopefully, a variety of techniques would be employed as Doug Bray suggested earlier. I am arguing in short for our getting started with best available techniques to obtain criteria while others among us continue more basic research.

In another setting at the A.P.A. annual meeting in September, I also urged that we utilize the best informed personnel minds to review present selection procedures. While I would hardly classify such activity as research, I do maintain that some improvement in present procedures can ensue without waiting for results of years of study. In short, I am urging a redirection of energy to the problem of teacher selection, research and procedure, in a reasonable and practical way without sacrificing the on-going need for basic research.

Finally, I would like to propose the need for establishing a clearing house for research and practice in teacher selection. I don't know who would establish this, I believe the field is important enough that some university interested in developing this branch of educational administration might be encouraged to assume such leadership. Certainly a repository of findings with dissemination facilities would be a major resource in the development of interest in the field.

Discussion

Murray Rockowitz: As is frequently the case, Dr. Gilbert is heard as the honest broker to bring together the challenge hurled by Drs. Bray, Ryans, Mitzel, and Medley. In any case, I think that we're at a point now where questions can be fired at the panel from you to clarify any thing that they have said this morning.

David Darland: Aren't we really talking about applied research? Would it be feasible for some university, or combination of universities, to define this problem in all of its ramifications so that the research would be directed toward a team kind of an effort to get away from our tendency to be so piecemeal?

Paul Denn: As I get it, Dr. Darland's proposal is not to have the clearing house of results of research, but also a clearing house prior to research.

David Darland: I'm suggesting an approach for getting at a problem of massive dimensions with appropriate means.

Murray Rockowitz: Any comment on that?

John Flanagan: My experience with having sort of a committee approach has not been very good. Researchers typically just don't want to do somebody else's research that they have defined. I think that in certain instances people have set back the field ten years by outlining all the research and spelling out the research designs for all the projects that needed to be done in that field and, of course, this immediately then took all of those out of the realm of possibility for any self-respecting independent researcher, because he wouldn't do a study that had already been designed and printed in a book by another psychologist or researcher. So that I don't know, I think that theoretically it sounds fine, actually I'm not so sure that that's the way to get things done. I guess that the particular formula which I have found very effective is that instead of piecemeal projects, you have a program and you could have a program and perhaps that's what you meant. It's not sort of a committee where we all get together, but you have to have a director and you have to have somebody planning the program, or a group planning the program, and then make assignments of things to do.

David Darland: For the record, by God, I didn't use the word committee.

John Flanagan: All right. Well, I think there's no question but what one needs large scale, long range, concerted attacks on things and I'm certainly on the record for it. A. T. and T. would fail if they didn't do that. That is correct, and so would Standard Oil. Yes, I think that that's a very good example where in a recent study we did for A. T. and T., we probably pushed the field ahead about twenty years above where it would have normally been by just their giving us enough money to do a good study.

Murray Rockowitz: Are there any other questions? Yes, Dr. Mitzel.

Harold Mitzel: I would like to echo what John said about publishing lists of needed research. You know about ten years ago, the American Association of College Teachers of Education put out a little green book which was called "Needed Research in Teacher Education," and as far as I know, not one of the hundreds of ideas or suggestions in that little book was ever picked up.

David Darland: I want to again insist that I was not suggesting publishing lists; I was suggesting quite another technique. I just want to be clear here about what I was suggesting.

David Ryans: I just want to respond to Dave here, just for the heck of it you know, that he did say couldn't some university or some group do this, and I think that's the thing that Dr. Flanagan and Harold Mitzel and that I, too, would very much oppose, any one group, because there are lots of different approaches. No one of us, I hope, is God and knows all the answers of how this should be done and there's lots of room for different programs but, if you mean programatic, Dave, fine; if you mean some one group say now here's the scheme of all that should be done in this area, then I don't believe it.

Samuel Brownell: I would like to take advantage of the opportunity to suggest some things that weren't said this morning in reference to looking ahead in this field of teacher selection. As I've listened and recognized some of the traumatic experiences that we went through when I was in Detroit and we were trying to do a better job of teacher selection, I recognize the change that is taking place very rapidly and the changes that are ahead of us.

In this vein I'd like to comment on a couple of things. One is to look at this problem from the standpoint of the person who goes through it. We talked pretty much about the students and the people who were doing the examining business. I think we have to recognize that people who come up to the point where they reach the

Board of Examiners or the teacher selection process have put in a very sizeable investment over a period of years. Most of them have been looking forward to reaching that point. We may well consider what is their attitude and what's the effect on them of getting the job or not getting the job. That's a pretty important decision that's made from the standpoint of the human beings that are affected, and I think we can't overlook that. I suspect that their experience in going through the selection process has a lot to do with the attitude toward the school system based upon whether they are selected or whether they are rejected. It has a lot to do, too, with the attitude of a great many other people who are their friends and relatives as to their opinion in regard to the school system, and particularly in regard to the examining process. I'm afraid there's been a lot of negative attitude developed towards schools and school systems on the part of those who have had unfortunate experiences as a result of what has happened to them, and they may have come to respect teaching less because of their experiences. I think we ought to realize that this is an area which has to be taken into account.

A second thing that I wanted to comment on is citizen expectation of teachers as I see it in our large city schools. I think we've centered in our consideration on certain of the aspects of teaching. I happened to be unable to be here the night before last because I was with a group of citizens who were talking about problems of the city and what can be done in the function of schools and other agencies toward making cities better places for people to live. The concern of the citizens with whom I was meeting was that in our approach to urban redevelopment we sometimes forget that cities are for people! The question was raised by this group of citizens as to whether or not, in view of the complexity of cities, we are going to be able to make cities work as places for people to live and to bring up families.

Well, obviously cities have to work, and what's the role of the teacher going to be in this? Is there any way that we can in our teacher selection procedures aid in selecting those people who believe in people and their worth, their dignity, and the role of the school in making cities better places for people to live? I'm not at all sure but what we may find in the next decade that we'll have more citizen pressure on us to have the schools contribute more to the human aspect of education and living, than perhaps on some of the concerns we have about reading and writing. I think we ought to be looking to see whether or not there is anything we can do in our teacher selection to encourage more of those people who have attitudes of responsibility for pupils as important, developing individuals, and discourage people getting into teaching who may be technicians, but who themselves are fleeing from their responsibilities of making the city a good place to live.

Now, one or two other things that I wanted to comment on that I think we have to work on in teacher selection. What is the appropriate role of teacher organizations and of the organized teaching profession in this selection procedure? I have a very strong feeling that within the next decade we have to re-examine our teacher selection procedures as to what the more active participation of teacher organizations in school policy making and in school operations means to the people who are in the teaching profession and what their role shall be. I think that any school system that isn't examining its procedures in light of this question is going to find itself in a crisis situation on this point. I think we should be doing some thinking on that.

I think, too, that in this teacher selection area we must give much more attention to the appropriate procedures for selecting the paraprofessional aides in our schools. Unless I'm wrong, every school system is going to be spending about as much time and energy on the selecting of paraprofessionals or the aides in our schools as they are on teachers. I wouldn't be at all surprised to see that we have as many people in the school who are not professional teachers as we have people who are teachers. We'd better gear our teacher selection procedures for the selection of these other people so that they can be utilized effectively and so that we can discriminate between those who should and those who should not be employed on valid bases where we have to make discrimination.

Another area which hasn't been mentioned has to do with the rehabilitation of the teacher who is evaluated as unsuccessful in a particular school or assignment. We select people and then we put them into a large school system. They don't always make out well in their first job or maybe their second job. We can't just throw them into the discard. There has been too much invested in them and by them.

Finally, I'm wondering if this group isn't the appropriate group to consider the matter of reciprocity in teacher selection. Why should a person who goes through the careful selection procedure in Detroit and then has her husband move out to Los Angeles, have to go through the same kind of selection process as a person who has not gone through a careful screening for a city school teaching position? If the process in Detroit is good or if the person goes through a careful selection process in Los Angeles, why should the other city repeat it? The coming together of this group in terms of trying to find out who were successful teachers, it seems to me that you might find that there are two things worth considering. One, you might be able to find a lot more teachers who, having gone through that process once, when they move someplace else would rather stay out of teaching than to go through the process again. And secondly, I think you might find out that the procedures work just as well because all of us now accept that the children who come from one school system and go to another adjust pretty well. There are some mistakes, but I believe this area of reciprocity is one that this group might very well consider.

Now, what I tried to do then is simply to mention a few of the things that I haven't heard as things this group might very well do that I thought might be put in the basket.

Murray Rockowitz: And we welcome them. Yes, there are going to be many comments.

John Flanagan: I'd like to comment on just one or two of these. I think that it's very obvious that the decision should be made early, and we've found in our Project Talent study that the guidance procedures provided students in today's schools are just not adequate to prepare students to make good decisions in the elementary and secondary schools. Of course, the later the decision is made by a person to prepare for a career in teaching, the more unlikely it is that this person will get the best training for it. In our work at the American Institutes for Research at the present time we are trying to develop a set of guidance procedures based on the Project Talent findings which will identify the prospective teacher at an early age, will help him identify himself as this kind of person, and will enable him to plan his educational development. If our guidance procedures are correct, these people will have no difficulty in obtaining positions in school systems. We need to help people make the right decisions early. If you bring college graduates into your system and then find out one, two or five years later that they don't belong, this is much worse for them and their careers than having kept them out in the first place.

Harry Gilbert: I'd like to make some comments. I'm very glad that Dr. Brownell brought in the whole area of the social climate in which we are existing. Frankly, it was our failure to get social psychologists in here that led us to the conclusion that we had better limit our discussions. I think probably the most important thing we would do would be to agree that we have to examine the social climate which says that the teacher is the most important person in society, we entrust our children to him. But the same people who say that are not willing to support a teacher in a style to which he should be accustomed. The fact is that in almost any community there is resistance to raising teachers' salaries, providing the professional means of being a teacher in the real sense of the word. It may well be, as you've pointed out, that in the long run, it's the strength of the teacher organizations that will provide the professionalization and set requirements and demands on society that will be the most significant thing in this whole field.

On a less important level, I would like to take exception with the notion of reciprocity because I feel rather strongly that it will be the local community that will have to define the task for the teacher in that community. If that is the case, its selection procedures will have to be geared to its expectancies. At the same time, anybody who goes through the selection procedures in any one of the large cities ought to be able, with confidence, to get through a selection procedure elsewhere. The problem is, if we make it so time-consuming or complex, that it is in fact an ordeal. I don't know of any employing organization anywhere that will accept the selection procedures from another company or agency, or what have you, before it makes its final decision with respect to hiring the person for its own agency. But that's minor.

I think the real problem that Dr. Brownell has unearthed disturbs all of us. There is one other last thing that hasn't been said here that I'd like to bring up too, and that has to do with the tendency generally not to want to examine your own selection procedures. Why is it that people accept the interview so readily and rarely question what they are doing? Lowell Kelly, back around 1955 or so at one of the ETS conventions, took a stab at the psychodynamics of interviewing. He suggested, and I think that this is a very worthwhile notion, that when man interviews man and makes decisions about this fellow man as to whether he should get a job or should not get a job, this is a lot to be asking of himself. He, therefore, rejects as unacceptable the notion that he's not capable to do this and this is a very important factor in the psychodynamics of the interviewer. It too often has been pushed aside or unnoticed, but it is significant in our selection of people and in our training of them for these jobs. Again, that's another untouched area for research.

Murray Rockowitz: Thank you, Harry. I just wanted to comment briefly on one point, the second point that Dr. Brownell made. I think that Dr. Gold and the university representatives here will admit that there has been a movement away in teacher preparation from the standard canned courses in history, and philosophy and principles of education to more and greater emphasis on the behavioral sciences and the study of the sociological impact on education. Would that be true, Dr. Gold, in the teacher preparation courses? Pretty valid, yes.

I think that one of the possible subjects for research is a study of why the teachers are unwilling, as Superintendent Brown indicated yesterday, to move to the inner-city to do their teaching. What are the motivations that keep them away from this inner-city experience? I suspect, this is just a hunch, of course, that the fact that they've never worked at it or been introduced to it is a basic reason why, and that some of the programs in student teaching that are centered on the inner-city and the experience in the inner-city might dissipate some of the fear that exists because of an inadequate contact with the area.

Jay Greene: One additional area of research I think has been suggested, I don't know whether it's been indicated specifically, might be in the first selection step on the college level. Would-be teachers are being selected for teacher education programs in the colleges on various bases. If you compare the inadequacy of some of the selection by comparison with the selection that goes into other professions, I think the inadequacy becomes more readily apparent. If you want to become a psychologist in a graduate program, there's a rigorous selection procedure. If you want to become a physician or go into other professions, ditto. If you want to become a teacher, there is not that degree of selection. Now some of the research certainly should go into helping in that selection and to challenging even some of the basic assumptions. It may be that in normal times, when supply and demand equalize, that the preparation for teacher education should be in the graduate school, after an individual has had a chance to develop as an undergraduate. I know the establishment will oppose that tremendously, but it's a consideration merely for investigation and research as a possibility. If this is what's happening in all professions, why isn't it happening in teaching? Why isn't it good for teaching? I'm not saying this is the answer, but it's an example of challenging assumptions for research.

The second point is this. Harry Gilbert has indicated that to wait for the millennium until we get complete criteria is to postpone action unnecessarily long. He suggests that we try to do the best we can with criteria and get along with that job. I would go one step further than that. I'm mindful of the fact that research in education and in other fields of humanity has very little and long delayed impact on practice. You consider the thousands of research efforts done in the area of human activity during the year and the infinitesimal effect, unfortunately so, on practices. If you wait for research to really lead into making changes, it's a long term effort. I think probably that what happens is that individuals doing research develop insights into what's happening and gradually participate in meetings of this sort, and by discussion bring about changes. Therefore, my proposal, Harry, is to go one step beyond and to say to prepare to make changes based upon meetings of this sort where people who have developed these insights through research, through experiences, through the cross-fire of exchange, can get together and examine practices and suggest areas where different cities, towns and groups, can try things out. This is the way changes have been made in education by discussion and the determination often of one person in a community to try certain things. I think we ought not shy away from that and validation of research findings, but we ought to recognize that.

Murray Rockowitz: I'd like to state that this discussion will be continued, but now I want to turn the proceedings back to Mr. Denn. Before I do, I'd like to say that I'd like to grant a subjective grade of A to the panel this morning. I think that the homework assignment that they've given us is clear. I think that it's accepted by the class, that it has certainly been motivated, and it has certainly emerged from the discussions that we have been holding. I think we can go back to our own bailiwicks with increased insight into what has to be done and a full knowledge of how little we know about the actual procedures that we have been discussing in the last few days. I'll turn this now back to Mr. Denn.

Paul Denn: Let us take a five-minute break and then reassemble to consider specific blueprints for action.

Session No. 8: Summation of Conference

Chairman: Harry B. Gilbert, Pennsylvania State University

Harry Gilbert: Ladies and gentlemen, may I have your attention, please. I have a few charges that have been expressed to me. I'm going to suggest a way of effecting a compromise. Many people have suggested they would like to be out of here earlier than 12:30. I think it's quite important; you need time to pack, get ready, etc., and I'm going to suggest a procedure for getting us all out of here at 11:45, one hour from now.

It is this. It has been impossible to get everybody here to participate, much as we would like to have done this. I've talked this over with a few and it seems acceptable, if you won't object. This is the procedure I am now proposing: that we break up into four groups of approximately 8 to 10 to meet for 30 minutes, to elect a spokesman and to come up with three, four, five specific ideas that represent summary, outcomes, and suggestions for keeping momentum for this group. There are places right outside in the lobby where you can be separated from one another. But you have to limit yourselves to exactly 30 minutes, and be back here at 11:15 with an elected spokesman who will give a 2- to 3-minute summary of what your group has recommended. The spokesmen who come second, third, and fourth must also be disciplined enough to say we agree with Items 1 and 2 that have been suggested and add their additional ideas.

Now, does this seem like moving us too fast? I would like to give everybody a chance to bring in some suggestion, and I think this is one way where we can come up with some specific proposals. Does anybody object to this procedure? No? Then I suggest that we do the following: Dr. Brown of Los Angeles, will you take the first comfortable settee and will Harold Mitzel report to that group. I'm going to try to split up some of the research people. Mr. Perz, will you take a second group, a little bit away from group one, and Don Medley, will you report to that group.

Al Schiff, will you take a third group, somewhere further up in the corner, and John Flanagan, would you stay with that group. And Dr. Sanders, will you stay here with the remaining group. Now, what research person have I left out? Dave, will you stay here, please, Dave Ryans. It's a nice time to duck under a table, but I caught you. Will the industrialists among us break up, be schizophrenic, be in two places, do anything but, Doug and Paul, don't you stay in the same group. And, I think if you just don't sit here, and get started but, remember you've got to be back here at 11:15 with an elected spokesman and a 2- to 3-minute summary of suggestions, specific outcomes, some kind of closure for what this Conference has meant and what it can mean.

Albert Schiff: This will be a bit rambling, but I'm sure those of you who will consolidate all these suggestions will work it out somehow.

Our Committee, composed of Paul Baker, Rufus Browning, Paul Fitzgerald, John Flanagan, Irving Gold, Harry Miller, Ralph Walter, Fred Williams and Bernard Berger, believe:

(1) there must be a better screening of admission to the colleges of education, a real testing of attitudes and personality;

(2) that the training and experience and education at the college of education level must be intensified, modified and expanded in terms of the criteria that we believe will lead to more effective teaching, but these criteria have yet to be developed;

(3) that the initiative must be taken and closer cooperation must exist between school systems and the teacher training institutions. Somehow or other, there's a difference between the training at the college level and the expectation of large city school systems, and this can be worked out mutually;

(4) that the initial assignment of any teacher has to be a good running start. We have to develop and maximize the opportunities for success and this has to be built in as part of the professional responsibilities of the supervisors and administrators under whom this teacher must work, and this needs additional research;

(5) it is important that we have an interaction process going on, situational performances, perhaps simulated teaching, but this must be part of the selection procedure;

(6) there is really a dearth of research on "real" teacher selection techniques. We must make up for this dearth in research. Continuation of studies by Medley, Mitzel and Ryans are in order, but actually more research is needed about what happens in the classroom;

(7) there has to be a continuum of measurement from the teacher training institution through employment. And this doesn't mean that it stops at the probationary period. But let's go on and expand this to the more seasoned experienced teacher;

(8) we have to do a little more research on matching teachers for specific jobs. You know, we talk about the broad flexibility that we want in teachers, that teachers will be able to fit in if they're well qualified and trained, but perhaps we have to do a little more than this; in other words, are there certain kinds of jobs that teachers specifically can do?

(9) improvement of procedures. This whole universe of the young teacher; here we have thousands of young teachers, "brand new spanking" teachers, inexperienced, coming into our classrooms, we have a large sample to test and to measure. Let's see what we can do with this vast untapped source.

And last, but most important, remember, even though all our city school systems have said we have immediate problems today of staffing the classrooms, let's not forget that we're preparing teachers to teach kids in the 70's and 80's, that we have to research and plan, and the role of the teacher for the future, both from the school system's and the teacher training institution's point of view is most important.

Harry Gilbert: Thank you, Al. That was exactly three minutes, and I appreciate it. Speaking for the next group, Dr. Ted Lang, of New York City.

Theodore Lang: I would like to mention the names of our group members first: Mr. Benson, Mr. Cogen, Mr. Entenmann, Dr. Gold, Dr. Greene, Dr. Medley, Mr. Perz.

Going directly to the research that we believe to be essential, my committee would like to cite, first, the research in the selection of supervisors. We have regarded this area as one of prominence because of our feeling that it has been even more neglected than the subject of research in the selection of teachers and, more importantly, because our observation is that a good principal makes possible good staffing. Good leadership in the schools goes far toward meeting the staffing problems of the school. In the area of research for the selection of principals, we think immediately of the need for establishment of criteria for effectiveness of a principal, and second, techniques for the selection of principals.

Turning now to teachers, my committee feels that the first essential is to determine what makes an effective teacher. What are the criteria for selection of an effective teacher and what are teacher behavior patterns which lead to effective teaching? We believe the time to start this investigation is now. Because we feel that such research is essential to the improvement of the selection process, we urge that at least one large city develop in the near future a research program of the kind I have just described. We think that this should be a cooperative endeavor of the teacher education institutions, the Board of Examiners or the examining group, the personnel people and administrators of the school systems and, perhaps, of the teacher organizations. In this question of what makes a good teacher, we deem it important to distinguish the varied patterns of good teaching in distinct parts of the city or in different subject areas or levels. Picking up what has been said by Dr. Schiff, we think that such identification of behavior patterns for specific teaching areas might reflect itself in the selection techniques, which would become more diagnostic. The results of the testing of the prospective teacher should then be usable for placement purposes. Consequently, we would seek to place in a middle-class neighborhood the teacher who could teach well in such a neighborhood, and the teacher who has the potential for handling the disadvantaged child in the disadvantaged areas of the city, thus leading to better utilization of the teacher and enhancing the opportunities for his retention.

This leads me to the next major area of research, the area of retention. My committee breaks this into two parts: first, support for the beginning teacher; and second, research into the reasons why new teachers leave the service. Parenthetically, research in the support of the beginning teacher has been started in New York City through the Center for Urban Education, which, in cooperation with the Office of Personnel, is trying out six patterns of assistance for the entering teacher. Research into the reasons why teachers leave will be undertaken in New York City in the next few weeks. We have already collected data on teachers who left the system during the first six weeks of the term. We shall call them in for interviews and find out why they resigned, and also give them an opportunity to return to teaching. As Dr. Brownell suggested, we will seek to place them back in the City school system.

Our committee recognizes the great value of this kind of meeting. We think this type of session should proliferate regionally throughout the United States and should be repeated, perhaps annually. Further, we urge a discipline in the conduct of future meetings, in the sense that each meeting should bring forth a program for the ensuing year, developed by the researchers and the practitioners, and that each following gathering should bring a report of what has transpired in the preceding year, so that we can evaluate our own efforts. Finally, we suggest that leadership in this entire area might well come through the regional research laboratories being established under Title IV of the ESEA. Thank you.

Harry Gilbert: Thanks very much, Ted. And now, speaking for group three, Murray Rockowitz.

Murray Rockowitz: The one unanimous thing about the group's action was that I was to be its spokesman, for better or for worse, and the people who made the decision were Drs. Brown, Mitzel, Kalick, Lang, Lucey and Bray. I don't think that Dr. Lucey has been introduced. Would he stand and take a bow? He's here for the Council of Supervisory Associations of New York City.

Our concerns were similar to those expressed earlier by Dr. Schiff and by Dr. Lang and if I repeat some of them, I think it's important to repeat them because of the fact that the emphases will emerge.

There was concern for the necessity for resources. Dr. Bray, the industry representative, started with hard cash as the basic to any research that could follow, and, armed with that cash, he would look for a place to employ it. We all agreed that the climate where this research should take place would have to be a favorable climate, one not susceptible to pressures from various groups. Just where to find that, we leave to later deliberation.

There was further agreement with respect to the kinds of research that should take place, and there we identified three different kinds of research. Everyone agreed that the research that Dr. Flanagan outlined, basic longitudinal research, was essential, and that should go on regardless of any other consideration, and Dr. Kalick felt that the colleges could be counted upon in the actual effectuation of a good deal of the research program that would be developed. Dr. Mitzel stressed the two- to three-year intermediate type of research that would be based on process variables, perhaps, in observation of teacher behavior in the classroom as a starting point. He would stress that the New York City Board of Examiners, for example, move off in directions that would result from new conceptualizations of the examining process, all the while continuing with current procedures because of the necessities and exigencies of contemporary needs.

There is a third type of research, and there's a difference in the committee on this. The researchers feel that this third type of research is non-productive. The people more close to the firing line feel that it's necessary. I refer to the ad hoc type of research which seeks to dissipate generalizations which are generated by emotions and pressures of temporary circumstances with a cold douche of fact. I think, too, that we have to get a climate where post-employment, the teaching staff is willing, with certain guarantees, to submit itself to research techniques, being reassured that the data that are being asked of them will in no way prejudice their status in the schools.

And the final point that was made by Dr. Brown is, I think this was unanimous too, that there are problems which are common to the largest districts in this country and this entire session will have been wasted if we just let it drop here. It is essential that we have a dialogue, a continuing dialogue, and that there be follow-up meetings of these groups to implement these suggestions, and I think Dr. Lang made the point earlier, step-by-step implementation over a period of time with specific goals to be set from meeting to meeting.

Harry Gilbert: Thank you, Murray. And now, the friend of the no committee, Dave Darland.

David Darland: Thank you. As a group, we were very action-centered in our outlook. We felt that there were specific decisions that must be made, especially at crucial points in the process of selection of teachers. These points included selection itself, assignment, the earning of tenure, etc. We felt we knew a great deal more about how to develop programs related to these areas than we tend to practice. There was complete agreement that there had to be flexibility so that the characteristics and needs of any defined community would be met. This would include various interest groups, teachers associations, etc.

Our group was also in agreement that the problems of selection, and all its related problems, were so immense and so large that probably no city, no district or unit can solve them. Indeed, there was considerable support for a national educational manpower study. Such a study might include utilization of personnel and give some priority to research, particularly the type that would provide some predictive analyses. Such a study would, of course, have to include the dynamics of current society, recognizing that many of the things we have tried in an attempt to solve the educational manpower shortage just haven't worked.

Our group underscored again the importance of two kinds of research, namely, applied and basic. There was considerable discussion on the importance of defining problems in an appropriate context, i.e., broad enough to really get at them effectively rather than continuing to work on a piecemeal basis. In this regard, it is interesting to know that Louis Bright, the Associate Commissioner for Research of the United States Office of Education, has made the observation that, in the case of industry, after the basic research is done, it costs seven times as much to disseminate and innovate, and apply the idea as it does to do the basic research in the first place. He feels that we are falling down in education since we are not paying enough attention to the application aspects of research. Possibly this somewhat corresponds to the thinking of our group. Thank you.

Harry Gilbert: Thank you, Dave. I thank each of the Chairmen, Al Schiff, Bob Perz, Bill Brown, and Dick Sanders for really getting the groups to move.

We have about five minutes and I have a few closing remarks to make. It's both a happy and a sad privilege to close out this Conference. Happy and sad because it gives me an opportunity to meet all of you and it represents a fruition of ideas that have been under consideration for a long time at the Board of Examiners.

Some specifics. We would hope that each and every participant to the Invitational Conference would take the time when he returns home to write to the Conference Secretary, Mrs. Klein. We suggest that you consider such things in the letter as, has this been a stimulus to any local action; secondly, has this been a stimulus to any action in organizations with which you are affiliated; third, what specific suggestions do you have for follow-up; and fourth, do you have any specific suggestions for the composition for the final report?

This is by way of announcing that there will be a report. We have each of the papers, the formal papers that were presented or summarized. These will be published in the proceedings. We have the comments that everybody has made, and may I suggest that we will assume that we have your permission to include the comments that have been recorded, unless you specifically direct us otherwise. You may wish not to be reported or recorded. Yes, we will edit them rather carefully, and if there is any doubt, we will communicate with you, but you'll have to leave some discretion with the editorial task force.

I want at this very last minute to repeat the thanks that Paul Denn and others have voiced. We thank Perry Kalick and Gerhard Lang. I want to thank Paul Fitzgerald particularly, for the many hours that he gave to this work. I want to thank our gracious secretary, Mrs. Klein. I want to thank the Board of Examiners for their participation, and Jerry Eisenberg, here, who has come up here, given a couple of days, and has been working with back to the proceedings, eager to get into the discussion, but he has stuck to his guns, or I should say, his tapes. Thank you very much, Jerry.

And my final thanks, of course, go to the participants. You are all busy executives. That you have taken the time to prepare for this Conference and to participate in it is a tribute to you and to your recognition of the significance of the topic. On behalf of the Board of Examiners I thank you very much and hope you have a very pleasant trip home.

SECTION IV: REVIEW OF CONFERENCE

The diverse, and at times lengthy, comments on the variety of topics which occupied conference participants make it difficult to present their views as a synthesis of ideas. This review consists of three parts: 1) a synthesis of the discussions, 2) a blueprint for action, and 3) an evaluation of the conference.

Synthesis of the Discussions

Conference participants all agreed that teacher selection must be dealt with in the overall context of teacher training, teacher recruitment, teacher placement, and on-the-job training during the probationary period. The problems inherent in teacher selection involve basic issues of philosophical, psychological, political, sociological, as well as economic dimensions. One cannot grapple meaningfully with teacher selection unless and until one deals with the total gestalt. "The state of the art of teacher selection," remarked one participant, "has hardly emerged from the dark ages." The results of the two surveys,[1] which served as bases for this conference, reinforce this pessimistic observation.

A number of agencies and groups of people are, wittingly or unwittingly, partners in the teacher selection process: 1) candidates for teaching positions, 2) teacher training institutions, 3) teacher selection agencies (e.g., boards of examiners), 4) boards of education (including directors of personnel who appoint teachers to their first assignment), 5) school administrators and supervisors, 6) teacher unions and professional organizations, 7) accrediting agencies and state departments of education, and 8) the community.

The thrust of the conference deliberations centered on the roles of some of these agencies and groups of people in furthering or hindering the teacher selection process.

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[1] Gilbert, H. B.; Bogen, I.; Lang, G.; and Kalick, P. M. Teacher Selection Policies and Procedures in Large Public School Systems in the United States. Unpublished report, Cooperative Research Project No. S-334, Office of Education, U.S. Department of Health, Education and Welfare, 1966. 63 p.

Lang, G. and Kalick, P. M. Teacher Selection Policies and Procedures in Sixty-two School Systems Affiliated with the Metropolitan School Study Council Compared with those of Large Public School Systems in the United States. New York: The Board of Examiners, Board of Education of the City of New York, 1966. 28 p.

Candidates for Teaching Positions

The image of teaching as a career is still quite tarnished. Despite some adjustments in recent years, teacher salaries are still too low and are not attracting bright young people who are veering toward more lucrative fields. The real or imaginary image of the blackboard jungle is a greater deterrent to selecting teachers for the large urban schools than are possible inadequacies of the selection instruments. Moreover, the selection process itself tends to be often viewed as a barrier. These and other factors resulted in the observation made by all representatives of the larger urban schools: we have a shortage of teachers, let alone "effective" teachers, and a sizeable number of successful candidates (having passed the screening process) are lost to the more attractive suburban communities. The participants did not deal with the dynamics of vocational choice, i.e., why people select teaching. Teacher recruitment begins already in the elementary school. Teaching is the only profession which furnishes positive or negative models to all people. The "good" and the "bad" teachers who fill our classrooms are the unofficial recruiters and initial selectors.

Appointments to teaching positions in large cities must be made earlier than they are now made. May is the modal month for September appointments. These should be made in March.

Teacher Training Institutions

Teacher selection is a developmental process with at least three stages: 1) selection of students for teacher preparatory programs, 2) selection for the initial job, and 3) selection during the probationary period culminating with the award of tenure. There must be better screening at the entry level into the profession. Teacher training curricula must be modified better to prepare beginning teachers for the realities of the classroom. The recently announced programs by Fordham University and The City College of the City University of New York as well as others throughout the nation, are steps in the right direction. These programs are emphasizing more experiences in the schools for students. Representatives from the colleges and the school systems issued a call for much closer cooperation and coordination of efforts, a continuous dialogue of these two partners.

Teacher Selection Agencies

The following questions were posed: 1) What is the role of the teacher selection agency? 2) What are the candidates' perceptions of the selection agency? 3) Who should be selected? 4) What methods are and should be used? 5) How should we validate selection methods?

1) Role of Teacher Selection Agency

The teacher selection agency must consider that its selections have to be made within a framework of reality, which was spelled out in great detail by Dr. Redfern. Several administrators from the larger school systems joined him in this overriding consideration: current, and most likely future, teacher selection methods represent a compromise between what we are able to do, can do, and should be doing.

The representatives from civil service voiced the unanimous opinion that the merit system must always be an important component of the selection process. Even in times of teacher shortages, there exist oversupplies of candidates for certain teaching areas and, usually, for supervisory positions. Lacking definitive selection criteria, at the very least, teacher selection agencies must devise a selection process which screens out the "poor risks," e.g., candidates who lack basic communication skills, who are severely physically or psychologically handicapped, and who might be prejudiced against the kinds of children whom they will be teaching.

2) Candidates and the Teacher Selection Agency

Intensive efforts must be exerted to "sell" the selection process to the candidates and to improve and modify (streamline) procedures wherever possible. It is essential to discourage a seemingly widespread impression among candidates that they have to battle an impersonal system which seems to place too many roadblocks in the way of getting a teaching appointment. We must be cautious lest these attitudes toward the selection agency and its process are carried over into teaching. For the candidate's contact with the selection agency is his first contact with the "system" and it should, hopefully, be a mutually satisfactory one.

3) Who is to be Selected

The participants enumerated the usual array of characteristics presumed desirable for "effective" teachers. Three qualities were mentioned most frequently: commitment to teaching, ability to grow professionally, and flexibility. We should aim our efforts at the potential career teacher, not the temporary "drop-ins." We are selecting teachers for the 70's and 80's. Teacher roles are most likely to change in direction and emphasis. To educate children who can cope with the demands and uncertainties of the future, we must select teachers who themselves have the requisite attitudes and skills to deal with the demands and opportunities which the future will bring. Selection of paraprofessional personnel will develop into a major task, it is believed.

4) Methods Which Are and Should Be Used

Current methods, described in the two survey reports,[2] seem to screen out the "poor risks." There was a general consensus, however, that our selection methods do not assess the primary qualities we are looking for in our candidates. The representatives from industry cited techniques which school systems could experiment with. One of the most promising of these is the job simulation technique as exemplified by A. T. and T.'s assessment centers. Teacher assessment centers could be used as research criteria against which one could validate techniques and indexes used in the employment situation. Use of the video recorder as a means of training interviewers was another highly relevant suggestion offered.

5) Validation of Teacher Selection Methods

Agreement on valid criteria of effective selection methods and the development of adequate validating instruments has stymied researchers over a period of at least 50 years. This conference has not produced any quick or simple solutions. However, it did wrestle with this issue at practically every session. Three researchers outlined specific paradigms for validating teacher selection methods. It was strongly suggested that the aptitude test model be abandoned for the achievement model, that we focus on content, not predictive validity, and that we use measures of classroom performance derived from systematic classroom observation as data sources. The problem of validating selection devices can and should be tackled at various levels of complexity. In many instances we must settle for practical, immediate criteria and use crude instruments. The real breakthrough in this area, however, can come only by a broad, not piecemeal, attack as outlined in the position papers of Drs. Ryans, Medley, Mitzel, and Flanagan. Such a frontal attack must be a cooperative venture joined by school systems, teacher training institutions, and led by the hard-core researchers. All of the experts agreed that "overall teacher effectiveness" was a useless concept. Instead, specific examples of teacher behavior in specific settings should be used as criteria and selection instruments devised to predict success in these limited and circumscribed areas.

Boards of Education

Two of the many tasks of boards of education were explored: 1) to make teaching attractive, and 2) to provide a climate which is conducive to research on teacher selection problems as well as the means to conduct research.

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[2] Ibid.

Efforts to evolve effective teacher selection methods and to maintain high selection standards are, to a large extent, vitiated by the persistent shortage of candidates to man the classrooms of our large cities. The union representatives and several school administrators emphasized the weak holding power of our larger school systems. Boards of education must concentrate on making teaching more attractive. Several avenues are open, such as offering significantly higher salaries, appointing neophyte teachers to schools where there exists a maximization of probability of success or, conversely, by not appointing them to "difficult" schools which baffle the resources of highly experienced teachers, and by enabling teachers to teach, i.e., providing for the teacher's physical safety, creating smaller classes, employing teacher aides so that he can concentrate on instructional duties, etc.

A number of paradigms for research on teacher selection were proposed. The boards of education must provide staffing and resources to undertake the needed research and to protect the researchers from attacks by pressure groups which may wish to dictate the thrust, the methodology used, and the reporting of data to further their own ends rather than those of the teaching profession and of society at large.

School Administrators and Supervisors

School administrators and supervisors play crucial roles in the developmental teacher selection process. The participants regarded the probationary years as an intensive on-the-job training period as well as a golden opportunity to validate the initial screening efforts at the college and at the job entry levels. It was felt that teacher selection methods could be greatly improved by focusing on better methods of selecting school administrators and supervisors. Uncommitted and incompetent supervisors vitiate the best of recruitment and selection efforts. Inexperienced teachers who feel that they are floundering and are failing will not remain long in teaching. One director of teacher training called for an intensive and comprehensive program for school administrators to take the place of the all too common hodgepodge of courses which prospective administrators take to fulfill certification requirements.

Teachers Unions, Professional Organizations and the Educational Establishment

The participants recognized that teachers unions, professional organizations, and members of the "educational establishment" (e.g., accrediting agencies and state departments of education) play key roles in teacher selection. It was suggested that their role in the various decision-making processes be thoroughly studied. However, this conference did not delve into this area. The efforts of two militant organizations of teachers, represented at this conference, are well known with respect to upgrading teachers' salaries, reducing class size, greater per-pupil expenditure, and greater teacher involvement in educational policy-making, just to cite a few illustrations.

Community

The conference touched upon but did not come to grips with knotty issues such as the role of laymen in teacher selection, citizens' expectations of teachers, and the use and the selection of paraprofessional teacher aides. These and many other facets were relegated to deliberations which should be held in the future.

Blueprint for Action

A number of concrete suggestions emerged from the conference which are recorded in Session 8: Summation of Conference. Additional recommendations follow:

1) The problem of teacher selection must be attacked in a systematic manner, as spelled out in detail by Drs. Ryans, Mitzel, and Flanagan.

2) Teacher selection methods should be validated. Appropriate paradigms were offered by Dr. Ryans, Medley, Mitzel, Flanagan, and Gilbert.

3) Research efforts should be launched on the selection of school administrators and supervisors.

4) A number of recommendations were offered designed to cope with immediate problems (e.g., use of walk-in-tests; better training of interviewers by use of the video recorder, job simulation, etc.).

5) A working partnership should be formed among teacher training institutions, school systems and research workers drawn from diverse disciplines for the purpose of carrying out the major studies outlined in various position papers.

6) Regional seminars should be held for leaders in educational research, in allied disciplines, and school personnel administrators to bridge the gap in their respective conceptualizations.

7) A conference should be convened which deals with effective utilization of educational manpower. Since there appear to exist a good deal of uncoordinated and wasted effort in the field of teacher selection and considerable personnel pirating, such a conference seems very much needed.

8) Annual meetings, like this conference, should be organized, each meeting to have a specific program and course of action for the ensuing year to be assessed at the next meeting.

Evaluation of the Conference

An evaluation must, of necessity at this time, be purely subjective. It is too early to see which seeds will come to fruition.

All participants expressed a great deal of satisfaction with the conference. They felt it afforded a much-needed opportunity to exchange ideas. But, as must be expected, a number of negative comments were also expressed. One participant felt that the college representatives and the school administrators were too defensive and the researchers too theoretical. Another person deplored the apparent greater tendency to analyze and agonize over existing problems than to seek action programs which he felt might lead to solutions.

Time, of course, will provide the answer. In the meanwhile, it may be that the very many ideas - often conflicting - which were expressed at the conference will serve to stimulate readers who did not attend as well as those who did.

SECTION V: LIST OF PARTICIPANTS

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